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<110> Rosen et. al.
<120> 89 Human Secreted Proteins
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teteceggae teetgaggte acatgegtgg tggtggaegt aagecaegaa gaecetgagg
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agaaaaccat ctccaaagcc aaagggcagc cccgagaacc acaggtgtac accctgcccc
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catcccggga tgagctgacc aagaaccagg tcagcctgac ctgcctggtc aaaggcttct
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atccaagcga catcgccgtg gagtgggaga gcaatgggca gccggagaac aactacaaga
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ccacgcctcc cgtgctggac tccgacggct ccttcttcct ctacagcaag ctcaccgtgg
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acaagagcag gtggcagcag gggaacgtct tctcatgctc cgtgatgcat gaggctctgc
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gactctagag gat
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Trp Ser Xaa Trp Ser
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<211> 86
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<213> Artificial Sequence
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<221> Primer_Bind
<223> Synthetic sequence with 4 tandem copies of the GAS binding site
      found in the IRF1 promoter (Rothman et al., Immunity 1:457-468
      (1994)), 18 nucleotides complementary to the SV40 early promoter,
      and a Xho I restriction site.
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cccgaaatat ctgccatctc aattag
                                                                       86
<210> 4
<211> 27
<212> DNA
<213> Artificial Sequence
<220>
<221> Primer_Bind
<223> Synthetic sequence complementary to the SV40 promoter; includes a
      Hind III restriction site.
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<210> 5
<211> 271
<212> DNA
<213> Artificial Sequence
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<220>
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<223> Synthetic promoter for use in biological assays; includes GAS
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      1:457-468 (1994)).
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gcccctaact ccgcccagtt ccgcccattc tccgccccat ggctgactaa tttttttat
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ttatgcagag gccgaggccg cctcggcctc tgagctattc cagaagtagt gaggaggctt
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<210> 6
<211> 32
<212> DNA
<213> Artificial Sequence
<220>
<221> Primer_Bind
<223> Synthetic primer complementary to human genomic EGR-1 promoter
      sequence (Sakamoto et al., Oncogene 6:867-871 (1991)); includes a
      Xho I restriction site.
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                                                                       32
<210> 7
<211> 31
<212> DNA
<213> Artificial Sequence
<220>
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<223> Synthetic primer complementary to human genomic EGR-1 promoter
      sequence (Sakamoto et al., Oncogene 6:867-871 (1991)); includes a
      Hind III restriction site.
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<400> 8
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                                                                       12
<210> 9
<211> 73
<212> DNA
<213> Artificial Sequence
<220>
<221> Primer_Bind
<223> Synthetic primer with 4 tandem copies of the NF-KB binding site
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(GGGGACTTTCCC), 18 nucleotides complementary to the  $5^{\prime}$  end of the SV40 early promoter sequence, and a XhoI restriction site.

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<210> 10 <211> 256 <212> DNA <213> Artificial Sequence				
<220> <221> Protein_Bind <223> Synthetic promoter for binding sites.	use in biologio	cal assays;	includes NF	-КВ
<400> 10 ctcgagggga ctttcccggg gacttt caattagtca gcaaccatag tcccgc cagttccgcc cattctccgc cccatg ggccgcctcg gcctctgagc tattcc cttttgcaaa aagctt	ccct aactccgccc gctg actaatttt	atcccgcccc tttatttatg	taactccgcc cagaggccga	60 120 180 240 256
<210> 11 <211> 1893 <212> DNA <213> Homo sapiens				
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ctccttcgc ttggaatgcc ctttcc				300
cttcaggcac aagaggggcc cccata				360
cctgctatga agcccaccca atgctc				420
ccactagga gtaattgctc tgaggg				480 540
gtgaatggca cagggcggga gcacag ccaaataaaa accaggtagc attgtc				600
aagaattggg gatcttgagg cctagg				660
ttttgagggg gcagcttckg tgkgtg	_			720
agtgagtatg aggaaagagc aaacgt				780
aggtgaggcg ctagtttgag tagttt				840
gtttttatag gatcaaacag attttg	acaa aatgaaacaa	aagctatctg	acaaaagggt	900
agattgaata aatatgctgg atatgt	acac aggttaaagt	gtttccatca	catgcagcca	960
gttcctgctt agttccatgt gagtta				1020
attccaggcg agtacagcag ccgggc				1080
aggatccaaa ctcatttcac tgtcat			_	1140
ttctctttct accctgtttw aaaaaa				1200
ccaaaacact gcacaattca ccccaa				1260
cttatcttta tctcttctta aaagaa				1320
tacagecect gategaggtt aagate			_	1380 1440
actaaggaag aaaaacattc acgtct gccatgcctt agggatgcct gtgaat				1500
ttttcctttt attcccggca agctgt			-	1560
cagcgtggtg ctgggaattt tcgtgc				1620
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catgtctggc caggcgcggt agctcacgcc tgtaatccca gcactttggg aggctgagaa
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gggcggatca cttgaggtcg ggagtttgag accagcctgg ccaacatggt aaacctcgtc
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gccatgtctc agacaggttt gggcgaagat ttattctcag atggtgtttg ctccagcttg
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ccattactga cacctgcgct gccttcgctc ccaccttccc tgtttactgt gtactacgct
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tcttggcagg tttttcttcc atgatcatta tatcaaataa ttctttgccc attactgagt
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ggataaggcc caactctaaa gccctggtag taatattgtc atctggtgcc cttagtattg
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tggcgtctgt acctttcttt gtcttctttc ttctttcaag gtggctggtg gaatctgctc
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ggtggttgat aatcaccaat aaactagatg agggcttaaa ggcacttaga aaagttgcac
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gcacaaatgg aataaagaat gctgaagaaa ccctgaacat agaggttgta agatccacca
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tgcaggagga gctggatgca gcacagacca aaactactgt gtgtgacttg ttccgcaacc
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aaaaggacca cttccagacg ccatgcggca aaccctaccg ctgctgctgc tgacggtgct
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gegeeceage tgggeagaee eteceeagga gaaggteeeg etetteeggg teacteagea
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cgcggatgcg acggccttga ccctggcgaa ccgcaacctg gagcgcctgc ccggctgcct
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accgcgcaca ctgcgcagcc tcgacgccag ccacaacctg ctgcgcgccc tgagcacttc
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cgagetegge caeetggage agetgeaggt getgaeeetg egecaeaace geategeege
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accgctgtac tgattggcct ctacgtcttt gagcgcttcc ccaccagcat gattggagtg
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ggcctattca ccaacctcgt ctactttggc ctcctccaga ccttcccctt catcatgctg
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cccctgggcc tctatgccag gtggggacca gaagtcggga aggcacctac cacctgccct
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<212> DNA
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<210> 72
<211> 757
<212> DNA
<213> Homo sapiens
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<221> misc_feature
<222> (5)..(6)
<223> n equals a,t,g, or c
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<221> misc_feature
<222> (684)..(684)
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<221> misc_feature
<222> (734)..(734)
<223> n equals a,t,g, or c
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<213> Homo sapiens
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<211> 1803
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<223> n equals a,t,g, or c

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<211> 1080

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aagatgcccc ctccaggaga gagccaggat gcccagatga actgactgaa ggaaaagcaa

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480

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<222> (563)..(563)
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<222> (593)..(593)
<223> n equals a,t,g, or c
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<213> Homo sapiens
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169
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<211> 832
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (770)..(770)
<223> n equals a,t,g, or c
<220>
<221> misc_feature
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<222> (829)..(829)
<223> n equals a,t,g, or c
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cgccatggcc tggtggctca tcgccttcgc ccacggtgac ctggccccca gcgagggcac
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cctggaaggc gtggtggaaa ccacgggcat caccacccag gcccgacctn ctacctggcg
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<211> 1334
<212> DNA
<213> Homo sapiens
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<212> DNA
<213> Homo sapiens
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180
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aaa
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<212> DNA
<213> Homo sapiens
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<213> Homo sapiens
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<210> 131
<211> 2717
<212> DNA
<213> Homo sapiens
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<221> misc_feature
<222> (3)..(3)
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```
<223> n equals a,t,g, or c
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<221> misc_feature
<222> (10)..(10)
<223> n equals a,t,g, or c
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<210> 132
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<211> 413

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<213> Homo sapiens
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<213> Homo sapiens
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aaaaaaaaa aaaaaaaaaa aaaaaaaaag
<210> 135
<211> 2069
<212> DNA
<213> Homo sapiens
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<221> misc_feature
<222> (2037)..(2037)
<223> n equals a,t,g, or c
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3240
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gtaaggatat tgatgaccat gagatccctg ctcagaaccc ccttcctgtg tggcctgctc
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tgggcctttt gtgccccagg cgccagggct gaggagcctg cagccagctt ctcccaaccc
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                                                                   360
gaaggtgtca tcaacaaacc agaggcggag atgtcgccac aagaattgca gctccattac
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ttcaaaatgc atgattatga tggcaataat ttgcttgatg gcttagaact ctccacagcc
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                                                                   480
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aaaaa
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<211> 1142
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                                                                  420
cactgtgatg gccctaatgg cttccctgga tgcagagaag gcccaaggac aaaagaaagt
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                                                                  840
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                                                                 1020
ggttgctttt ttctggggtc tttgagctcc aaaaaataaa cacttccttt gagggagagc
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1140
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<212> DNA
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<221> misc_feature
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<223> n equals a,t,g, or c
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gcgcccaggg gctctacttc cacatcggcg agaccgagaa gcgctgtttc atcgaggaaa
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aggtetteet geectegace cetggeetgg geatgeacgt ggaagtgaag gacceegacg
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gcaaggtggt gctgtcccgg cagtacggct cggaggqccq cttcacqttc acctcccaca
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cgcccggtga ccatcaaatc tgtctgcact ccaattctac caggatggct ctcttcgctg
                                                                      420
gtggcaaact gcgkgtgcat ctcgacatcc aggttgggga gcatgccaac aactaccctg
                                                                      480
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                                                                      840
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gaggeggeee actagggeeg gtegtgaeta tgtgtetgee eegeaggeaa etategtaee
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cgcttcacgt tcacctccca cacgcccggt gaccatcaaa tctgtctgca ctccaattct
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accaggatgg ctctcttcgc tggtggcaaa ctgcgtgtgc atctcgacat ccaggttggg
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                                                                   1560
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aaaaaaaaa a
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gtcttgaact cctggcctca ggcaatccac tgccgcagcc tcccaaagtg ttgggattac
                                                                    360
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gttctgggtt cacttaatgg ctttgtgaat gtaaataagg ggcaggtctt ggccctagag
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gattgagatg tttttctata tcttagaact atttttggat aaattatata ttttccttcc
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tagtagaagt gttactgcct gtaactagct caaaatacca atgcagtttc tgcattctgg
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<211> 722
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (49)..(49)
<223> n equals a,t,g, or c
<400> 151
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cgcgtggtga aacacttcta ctggacctca gactcctgcc cgaggcctgg cgtggtgttg
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ctaaccttca gggataagga gatctgtgcc gatcccagag tgccctgggt gaagatgatt
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ctcaataagc tgagccaatg aagagcctac tctgatgacc gtggccttgg ctcctccagg
                                                                    420
aaggeteagg ageeetaeet eeetgeeatt atagetgete eeegeeagaa geetgtgeea
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actetetgea ttecetgate tecatecetg tggetgteae eettggteae etcegtgetg
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teactgreat etececety acceptetaa eccatectyt gesteestee etgeagteag
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agggteetgt teccateage gatteeeetg ettaaaceet tecatgaete eeceetgeee
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<212> DNA
<213> Homo sapiens
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1260
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<212> DNA
<213> Homo sapiens
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<221> misc_feature
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<223> n equals a,t,g, or c
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<221> misc_feature
<222> (353)..(353)
<223> n equals a,t,g, or c
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                                                                    120
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ttcaacctaa aacaatctgt aattgcttat tgttttattg tatactcttt gtcttttaa
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gacccctaat agccttttgt aacttgatgg cttaaaaata cttaataaat ctgccatttc
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356
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<211> 624
<212> DNA
<213> Homo sapiens
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ggaccattga gaccaaagtg caagaggaag cacagtggct catgaaggaa ctgaagaaaa
                                                                    480
caaatggctc accetgtgat ceceaattea teataggatg tgeteeetge aatgteatet
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gctccattgt tttccagaat cgttttgatt ataaggataa ggattttctt agcttgatag
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<212> DNA
<213> Homo sapiens
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gtagctggga ctacagcatg caccacgata cctggttatc ttttttattt ttttgtagag
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atgaggtete cetgtgttge ceaggetggt etcaaacace tggaetcaag ggateeteet
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<210> 156

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<211> 1050
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<222> (767)..(767)
<223> n equals a,t,g, or c
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<221> misc_feature
<222> (902)..(902)
<223> n equals a,t,g, or c
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<222> (936)..(936)
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<221> misc_feature
<222> (1012)..(1012)
<223> n equals a,t,g, or c
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gcttgggggg ccgggcttaa gcttggcata aaccttggtt ggaagaaccg gntactggcc
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<210> 157
<211> 678
<212> DNA
```

## <213> Homo sapiens

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agtgggtagg cgggagtgaa gagggaggta gcagtccctc cgcctctacc attagctcct
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ggaagggcgt cagaccatag gcccgcaaaa gtctgagaaa caagggacta aggtgtttgg
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gtgggggctg ctgatgcttt ctgacaccat tcctctggag ttgagaggtc aggggcaagg
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ccagaatcct gacatcctct ttttctttca gctaccagcc ctgcttcgtc ctccggagcc
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cctgcctacg ccccatgtgc tcctgcaggg gctggggctg ctgctggggg gcggcctcat
                                                                   480
                                                                   540
gcttgccata accetgctgg aggageggct actgccegtg accaetgagg gctgatgggg
ccagtggaaa ggggtcgggt tgcccttcct tccccccaac cacaggaatg gaggcgggac
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aaaaaaaaa gaaaaaag
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<210> 158
<211> 959
<212> DNA
<213> Homo sapiens
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gccctcgggg cgggcgccgg gatgtgtgac gggagccact tggcctccac cctccgctat
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cctgagggcc ccagccccct gctcaggtcc gtcagcttcg tctgctgcgg tgcaggtggc
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etgetgetge teattggeet getgtggtee gteaaggeea geateecagg geeaeetega
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                                                                   480
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gcactcagca aacgttcgtt gttgaaggct gttctattta tctattgctg tataacaaac
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<213> Homo sapiens
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tcaggccagg tcttcctcct atagtggaga gtatggaagt ggtggtggaa agcgattctc
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ctacatcgta ggtcttcagg tgcgctatgg caaggtgtgg agcgactatg tgggtggtcg
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caacggagac ctggaggaga tctttctgca ccctggggaa tcagtgatcc aggtttctgg
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gaagtacaag tggtacctga agaagctggt atttgtgaca gacaagggcc gctatctgtc
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                                                                  480
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ccgcttcatc agtggccggt ctggttctct catcgatgcc attggcctgc actgggatgt
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aaggctaaaa aaaaaaaaaa a
                                                                  681
```

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<211> 720
<212> DNA
<213> Homo sapiens
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ggatgatgtt gaaggtgatg aagataccac ttctgttaac agaggcattg cctgccttta
                                                                    180
ctgttgcctg ttggaaagtt gcttcagggg catatacaat agcagtttca gggagtggtg
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tgacctgtag caggaagggg aaagtcagga gaaaagaatt ttcttctctg caagagactg
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gggtaggtac cagctatttg acagggaggc actattcttg gatgtccatc tgcacactag
                                                                    360
attcatgagt gttggggatt acctgggcat cccaaaccat attacagtga attatgttat
                                                                    420
                                                                    480
tgttatttat ttaacatgta catatatttt caaaatatat agaaaatgtc agaatcggaa
aaaaaatcat agggacttag gcagttattg gagcttgctt taaaaaccca tatcagtgtt
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gaccagtatc tgggtttcaa gagaattgtc aggaaaagca gtcttaggtc aggagtggtg
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                                                                    660
gctcacaccc ataatcccag cactctggga ggccagggtg ggtggattga ttgagctcag
                                                                    720
gagtttgaga ccagcctaag caacatggtg aaaacccatc tctacaaaaa aaaaaaaaa
<210> 161
<211> 878
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (875)..(875)
<223> n equals a,t,g, or c
<400> 161
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cgcaacctcc acctcctgga ttcaagcaat tctcctgcct cagcctccca agtagctggg
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cccagagtgc tgggattaca ggcgtgagcc actgttccca gcaggaattt ctttttata
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                                                                    660
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                                                                   720
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aaaaaaaaaa aaaaaaaaaa aaaanggg
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<210> 162
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<212> DNA
<213> Homo sapiens
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tgagatggag tttcgctctt gtcgctcagg ctggagtgca atggtgcgat ctcggctcac
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cgcaacctcc acctcctgga ttcaagcaat tctcctgcct cagcctccca agtagctggg
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300
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cccagagtgc tgggattaca ggcgtgagcc actgttccca gcaggaattt ctttttata
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gtattggata aagtttggtg tttttacaga ggagaagcaa tgggtcttag ctctttctct
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tgtcatagga ctctggacaa tctcacacct tagctattcc cagggaaccc cagggggcaa
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ctgacattgc tccaagatgt tctcctgatg tagcttgaga tataaaggaa aggccctgca
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<210> 163
<211> 609
<212> DNA
<213> Homo sapiens
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<221> misc_feature
<222> (591)..(591)
<223> n equals a,t,g, or c
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ttatgcagag aaagagctgg tgcagtctct gaaagagtac atccttgtgg aggaagccaa
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gctttccaag attaagagct gggccaacam aatggaagcc ttgactasca agtcagctgc
                                                                    240
tgatgctgag ggctacctgg ctcaccctgt gaatgcctac aaactggtga agcggctaaa
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cacagactgg cctgcgctgg aggaccttgt cctgcaggac tcagctgcag gttttatcgc
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caacctctct gtgcagcggc agttcttccc cactgatgag gacgagatag gagctgccaa
                                                                    420
agccctgatg agacttcagg acacatacag gctggaccca ggcacaattt ccagagggga
                                                                    480
acttccagga accaagtacc aggcaatgct gagtgtggat gactgctttg ggatgggccg
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gcagcttga
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<210> 164
<211> 1461
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1401)..(1401)
<223> n equals a,t,g, or c
<220>
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<222> (1432)..(1432)
<223> n equals a,t,g, or c
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cctggtttgg tgtcctgagc tgtgtgcagg ccgaattctt cacctctatt gggcacatga
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                                                                    240
aggaagccaa gctttccaag attaagagct gggccaacaa aatggaagcc ttgactagca
                                                                    300
agtcagctgc tgatgctgag ggctacctgg ctcaccctgt gaatgcctac aaactggtga
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```

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ageggetaaa cacagactgg cetgegetgg aggacettgt cetgeaggae teagetgeag
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gttttatcgc caacctctct gtgcagcggc agttcttccc cactgatgag gacgagatag
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                                                                      540
ccagagggga acttccagga accaagtacc aggcaatgct gagtgtggat gactgctttg
                                                                      600
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gccgcctgct ctcccttgac ccaagccacg aacgagctgg agggaatctg cggtactttg
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caaccccaga aggcatctat gagaggcctg tggactacct gcctgagagg gatgtttacg
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<212> DNA
<213> Homo sapiens
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tggtggtgcc accgtcttcc ctgatctggg ggctgcaatt tggcctaaga agggtacagc
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etgecetgtg ettgtggget geaagtgggt etceaataag tggtteeatg aacgaggaea
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ggagttettg agacettgtg gateaacaga agttgaetga eateetttte tgteetteee
                                                                      420
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agggegacte etgtgtgact gaagteecag eeetteeatt eageetgtge cateeetgge
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                                                                      720
                                                                      780
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<211> 635
<212> DNA
<213> Homo sapiens
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caccttgggc tgaagctgct gctgctcctg ctgctgctgc ccctcagggg ccaagccaac
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atgggacccc ctgggatgcc aggggtgccc ggccccatgg gcatccctgg agagccaggt
                                                                      420
gaggagggca gatacaagca gaaattccag tcagtgttca cggtcactcg gcagacccac
                                                                      480
cagscccctg cacccaacag cctgatcaga ttcaacgcgg kcctcaccaa cccgcaggga
                                                                      540
gattatgaca cgagcactgg caagttcacc tgcaaagtcc ccggcctcta ctactttgtc
                                                                      600
```

```
635
```

```
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```

```
<210> 167
<211> 1195
<212> DNA
<213> Homo sapiens
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<221> misc_feature
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<223> n equals a,t,g, or c
<220>
<221> misc_feature
<222> (1173)..(1173)
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<220>
<221> misc_feature
<222> (1191)..(1191)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (1193)..(1193)
<223> n equals a,t,g, or c
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ggacgtgggg cccagctccc tgccccacct tgggctgaag ctgctgctgc tcctgctgct
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                                                                   240
gccyggggca ccagggaagg atgggtacga cggactgccg gggcccaagg gggagccagg
                                                                   300
aatcccagcc attcccggga tccgaggacc caaagggcag atacaagcag aaattccagt
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cagtgttcac ggtcactcgg cagacccacc agccccctgc acccaacagc ctgatcagat
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tcaacgcggt cctcaccaac ccgcagggag attatgacac gagcactggc aagttcacct
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tectgetett eccegaetag ggegggeaga tgegetegag ecceaeggge ettecaeete
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aaaaaaaaa aaggggsggc cgtttnaaag ganccaagtt tacgaacccg ngnat
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<210> 168
<211> 1055
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1009)..(1009)
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## <223> n equals a,t,g, or c

<212> DNA

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                                                                      120
ggacgtgggg cccagctccc tgccccacct tgggctgaag ctgctgctgc tcctgctgct
                                                                      180
getgeeecte aggggeeaag ecaacaeagg etgetaeggg ateceaggga tgeeeggeet
                                                                      240
gcccggggca ccagggaagg atgggtacga cggactgccg gggcccaaqq qqqaqccaqq
                                                                      300
aatcccagcc attcccggga tccgaggacc caaagggcag aagggagaac ccggcttacc
                                                                      360
cggccatcct gggaaaaatg gccccatggg accccctggg atgccagggg tgcccggccc
                                                                      420
catgggcatc cctggagagc caggtgagga gggcagatac aagcagaaat tccagtcagt
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gttcacggtc actcggcaga cccaccagcc ccctgcaccc aacagcctga tcagattcaa
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cgcggtcctc accaacccgc agggagatta tgacacgagc actggcaagt tcacctgcaa
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agtccccggc ctctactact ttgtctacca cgcgtcgcat acagccaacc tgtgcgtgct
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gctgtaccgc agcggcgtca aagtggtcac cttctgtggc cacacgtcca aaaccaatca
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ggtcaactcg ggcggtgtgc tgctgaggtt gcaggtgggc gaggaggtgt ggctggctgt
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gacgtgggge ccageteect geeceacett gggetgaage tgetgetget cetgetgetg
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ctgcccctca ggggccaagc caacacaggc tgctacggga tcccagggat gcccggcctg
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## <213> Homo sapiens

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		aggcccaggc				300
gttcagcgtg	gaccaactta	tggaactggc	cgggctgagc	tgtgctacag	ccatcgccaa	360
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gggga						425
-010- 171						
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	2012					
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		gtggccgctg				240
		aggcccaggc			_	300
		tggaactggc			_	360
		tgtccaggag				420 480
		gtctggtctg aaaggcctaa				540
		ctttccttgg				600
		tggatgccat				660
		tgagtgtcct				720
		acgtggagaa				780
		ccaaaaaatc				840
cctggggggt	cgttttgtgc	cacctgctct	ggaaaagaag	taccagctga	acctgccacc	900
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		ctctcttcca				1020
		ggaagtcaga			-	1080
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<210> 173

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ggtcttctsc tggtgaaaag tgtccaggtg aaattggaga ctcctgggac gtgaaatggg
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<212> DNA
<213> Homo sapiens
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tgagaattat gcgtcacgac ccgaggcgtt taaggctgat gagttcctga actggcacgc
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cctctttgag tctatcaaaa ggaaacttcc tttcctcaac tgggatgcct ttcctaagct
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gaaaggactg aggagcgcaa ctcctgatgc ccagtgacca tgacctccac tggaagaggg
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ggctagcrtg agcgctgatt ctcaacctac cataactett teetgeețea ggaactecaa
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<213> Homo sapiens
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gggctatggc tatgaaggaa cagattcaaa taagaataaa tattggcttg tcaagaacag
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ctgtggactt gccaccgcgg ccagctatcc tgtcgtgaat tgatgggtag cggtaatgag
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caaaccatgg tacttgaatc attgaggatc caagtcatga tttgaattct gttgccattt
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ttacatgggt taaatgttac cmctacttaa aactcctgtt ataaacagct ttataatatt
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gaaaacttag tgcttaattc tgagtctgga atatttgttt tatataaagg ttgtataaaa
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gteettgttt gtgettettt ttgeacatae aagaetttgt tettetgttt ttggggatag
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aaaaaaaaa aaaaaaaa
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<223> n equals a,t,g, or c
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<223> n equals a,t,g, or c
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ctccgagttg agagaattct atgatccaga tacagtggag ctgatgaact ggattaactc
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taacactcca agaaaggctg tgtttgcggg aagcatgcag ttgctggccg gagtcaagct
                                                                      420
gtgcacggga aggaccctaa ccaaccaccy gcactatgaa gacagcagcc tgagagagcg
                                                                      480
gaccagagcg gtttatcaga tatatgccaa gagggcacca gaggnaagtg catgcctcc
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taaggteett eggeaetgga etaegtaate etggaagaea geatetgett aegageggag
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<212> DNA
<213> Homo sapiens
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aatatatgta gccaagtaga atttattaca ttttagtgtt attattttaa aamwtactga
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twototttaa cototootgo agtaatagtt ttgotttatt tottactoat ttcaatttat
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caatcttact gggaaggccc tggtagtgta attcttttcc ttattaaaag gtaaccaagt
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gcctctaagt catgcttatt tgtaaacaac aaagaagagt atatgtacct gctcaaaatt
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180

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<213> Homo sapiens
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<211> 604
<212> DNA
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<213> Homo sapiens

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gcaaagctat gtctaccaga tgagaaaaat gaattctatc ttcagaactg cggggcattt
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tttt
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<210> 182
<211> 1361
<212> DNA
<213> Homo sapiens
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<221> misc_feature
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<223> n equals a,t,g, or c
<400> 182
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geggacecca eggagegege ggegegggte eceggggteg ageatetece egeageeaac.
                                                                      120
ggcaagggcg gcgaggctcc ggccaacggg ctgcgcagag ccgcggcgcc ggaggcttat
                                                                      180
gtacagaagt acgtcgtgaa gaattatttc tactattacc tattccaatt ttcagctgct
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ttgggccaag aagtgttcta catcacgttt cttccattca ctcactggaa tattgaccct
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tatttatcca gaagattgat catcatatgg gttttggtga tgtatattgg ccaagtggcc
                                                                      360
aaggatgtct tgaagtggcc ccgtccctcc tcccctccag ttgtaaaact ggaaaagaga
                                                                      420
ctgatcgctg aatatggaat gccatccacc cacgccatgg cggccactgc cattgccttc
                                                                      480
accetectta tetetaetat ggacagatae cagtatecat ttgtgttggg actggtgatg
                                                                      540
gccgtggtgt tttccacctt ggtgtgtctc agcaggctct acactgggat gcatacggtc
                                                                      600
ctggatgtgc tgggtggcgt cctgatcacc gcactcctca tcgtcctcac ctaccctgcc
                                                                      660
                                                                      720
tggaccttca tcgactgcct ggactcggcc agcccctct tccccgtgtg tgtcatagtt
gtgccattct tcctgtgtta caattaccct gtttctgatt actacagccc aacccgggcg
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gacaccacca ccattctggc tgccggggct ggagtgacca taggattctg gatcaaccat
                                                                      840
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gttacctaca catctgttgg catctgcgct acaacctttg tgccgatgct tcacaggttt
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                                                                     1200
cataggaaag ttattggtag gcaaatcttg acaacttatt tttctttaac aacaacaaaa
                                                                     1260
agtcatacgg ctgtcttgct actaccagat aaatgatgct gctgtgtgaa aggaaaaaa
                                                                     1320
                                                                     1361
aaaaaaaaa aactcnaggg ggggccggta acaaattccc c
<210> 183
<211> 426
<212> DNA
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<213> Homo sapiens
<220>
<221> misc_feature
<222> (360)..(360)
<223> n equals a,t,g, or c
<400> 183
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                                                                      120
ttcctcckgt tcggtgggga cctggggtgt gagcgccgcg agcctggcgg gcgagcgggg
                                                                      180
gccccgggat gcttccccgg cccgctcatg ccacgtgtcc ccccagacgg gaggctgcgg
                                                                      240
agageegeeg ceetegaegg agaeeegggg geeggeeeeg gggaeeacaa eegeteegae
                                                                      300
tgcggcccgc agccgccgcc gccgcccaag tgcgaggtag gtgcgcgcgg ccctggcqqn
                                                                      360
gggagtcctg ggggcgccgc ccccgagccc ggcctcttgg acatctgcgg gaatcacagt
                                                                      420
acctgg
                                                                     426
<210> 184
<211> 627
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (541)..(541)
<223> n equals a,t,g, or c
<220>
<221> misc_feature
<222> (576)..(576)
<223> n equals a,t,g, or c
<220>
<221> misc_feature
<222> (598)..(598)
<223> n equals a,t,g, or c
<220>
<221> misc_feature
<222> (604)..(604)
<223> n equals a,t,g, or c
<400> 184
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                                                                      120
acctttggtc tttgatgatg gtgacctaca gatggggttt tggtgtggat atcctttttg
                                                                      180
tggatgttga tgctattcct ttctgtttgt tagttttcct tctaacagtc aggtccctca
                                                                      240
gtggcaggtc tgttggagtt gctggaggtc cactcccgac actgtttgcc tgggtatcac
                                                                      300
cagtggaggc tgcagaacag caaatattgt agaacagaat agattgctgc ctgatccctt
                                                                      360
                                                                      420
ecceggaage tttgteecat aggtgeaace tgetgtatga ggtgtetgtt ggeecetaet
tggaggtgtc tcctagttag gcctacatgg ggctcaggga cccacttgag gaggcagtct
                                                                      480
gtccattctg agaactcaaa caccatgctg ggagaaccac tgctctcttc agaactgtca
                                                                      540
ngcagggacg tttaagtctg cagaagtttc cattgnctct tggtcaacta tgccctgncc
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                                                                      627
<210> 185
<211> 528
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<212> DNA
<213> Homo sapiens
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cacatggett ggtggeegaa etecaegtge tggeteetea eagetgteae eatggeettg
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gctacccgct gcgtccctca ggagctgcca tcaggttctg aggtgcctgg tctggaggca
                                                                      240
gtccaggtgg tgaggtctgg actggctgga ccccaccgat gctcctgccg tcaccccgtc
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ctggccctca ctggaggcag ggacactcag gggcccgggg cctcggggcc agtgctgcag
                                                                      360
tggccgccgt tgctctcaca gcgggtccag gcctggcttc tgaaggcaat gtgcctgcgt
                                                                      420
ctcacactca aaagggcctg ccaggctgca cctggcggca gctcccacgg gggacgatgt
                                                                      480
cctgctgtct gttggccccc aggtgggagg gacggscgyg gagctgca
                                                                      528
<210> 186
<211> 522
<212> DNA
<213> Homo sapiens
<400> 186
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gcattggtgc cagctcacct tcaagaagct catgggcttc tctccttgca tcttctgggg
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tegeggtete tteteageea ceteetgggg cetgetgeee tttgetgtge ceateaceae
                                                                      240
tgtggtgggc cgccccatcc ccgtccccca gcgcctccac cccaccgagg aggaagtcaa
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tcactatcac gccctctaca tgacggccct ggagcagctc ttcgaggagc acaaggaaag
                                                                      360
etgtggggte ceegetteea eetgeeteae etteatetag geetggeege ggeetttege
                                                                      420
tgagcccctg agcccaaggc actgagacct ccacccactg tggactccat gcctccaata
                                                                      480
aaaggtagtt ctgggcccaa aaaaaaaaaa aaaaaaaaa aa
                                                                      522
<210> 187
<211> 1491
<212> DNA
<213> Homo sapiens
<400> 187
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ttgagagcag cccacctcca cgcttcctta acggagaggt gcaggactca gacttcacca
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gcccactcgg tcccagcctt gtacgcaaag agacgtcaag gacgcgctct cccgcgtcca
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ggcagcccca gcttgctggc ttgcctgccc gcctgcgtgc agcactcggc cggcgtgcag
                                                                      300
catgaccetg tggaacggcg tactgccttt ttacccccag ccccggcatg ccgcaggctt
                                                                      360
cagcgttcca ctgctcatcg ttattctagt gtttttggct ctagcagcaa gcttcctgct
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                                                                      480
                                                                      540
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agtgaacacc aacacatect acaaageett cagegeageg egegttacag eeegtgtegg
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tctgctcgtg ggcctgragg gcattaatat tacactcaca gggaccccag tgcatcagct
                                                                      660
gaacgagacc attgactaca acgagcagtt cacctggcgt ctgaaagaga attacgccgc
                                                                      720
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                                                                      780
                                                                      840
gttcacaccg agtagecett geggeetgta ceaccagtae cacetggegg gacactaege
cteggceacg ctatgggtgg cgttctgctt ctggctcctc tccaacgtgc tgctctccac
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geoggeoceg etctaeggag geotggeact getgaecace ggageetteg egetettegg
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egegeteace acteagtacg gegeegeett etgggteacg etggeaaceg gegteetgtg
                                                                     1080
cctcttcctc ggaggggccg tggtgagtct ccagtatgtt cggcccagcg ctcttcgcac
                                                                     1140
ccttctggac caaagcgcca aggactgcag ccaggagaga gggggctcac ctcttatcct
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cggcgaccca ctgcacaagc aggccgctct cccagactta aaatgtatca ccactaacct
                                                                     1260
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gtgaggggga cccaatctgg actccttccc cgccttggga catcgcaggc cgggaagcag
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tgcccgccag gcctgggcca ggagagctcc aggaagggca ctgagcgctg ctggcgcgag
                                                                   1380
gcctcggaca tccgcaggca ccagggaaag tctcctgggg cgatctgtaa ataaaccttt
                                                                   1440
ttttcttttg ttttttaaaa aaaaaaaaa aaaaaaaaa agggcggccg c
                                                                   1491
<210> 188
<211> 725
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (689)..(689)
<223> n equals a,t,g, or c
<400> 188
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ggcatgtgaa tggagccaca gtaagaaatg aggacaaatg gaagccactc aacaacccca
                                                                    120
gaaacagaga tctgtttttc agaaggcttc aggcatattt taagggcaga ggtcttgatc
                                                                    180
ttggaacatt tccaaatcct ttccccacga atgaaaatcc tagacctctc tctttccagt
                                                                    240
                                                                    300
cagaacttac tgcttctgca tctgcagatt atgaagagca gaaaaactcc tttcacaatt
atctcaaagg ctgaaagttt cttctgagct caggtgtctg gctattttaa aactacagat
                                                                    360
gaagcttctc attagaaaaa ttcaaccatt gtcatagcta aactttcatg gagtttcttt
                                                                    420
eccepteact titatitite agtitigiaat gattitatic cacatticea tattiacata
                                                                    480
taaatcgctg gaactatgat ttctatgcat atttatggag tttttttcct atgaaaccat
                                                                    540
aaatattgat gtagagcacc gcatgtattt gtaggagtta caaaaacatc acaaactgaa
                                                                    600
aaaagattat aatctaaatt agatgtttct ttaagcttgt ttttaaactt gkcttttatg
                                                                    660
tttattatct ttatcgacca atatattgnt ttaaagggcc atgctcactt ttagtatagt
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aaaat
                                                                    725
<210> 189
<211> 616
<212> DNA
<213> Homo sapiens
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                                                                    120
attaagttaa aatggaagca aacaacacca acaaacatgg gattytagaa gttgtcaacg
                                                                    180
cctccaaaga tgctctttgc cagagtattc agaggtggac attgtgcccc atcaaatatt
                                                                    240
ctagcaatgc ccgagccctt gctttcatac acaacctcct caggaaggaa aagtagaaac
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aggtgatttc ctctctttcc aaccagcccc tgctctcctt actctagstc atgctgagtt
                                                                    360
attctgattc ccatactcmc atttggaata gctgcttttc ctgtatcttt atagatagct
                                                                    420
geatcatett etetgtgatt eetgcaaaag gaatgttgem etaaaatgca acattgteet
                                                                    480
aacattagtc tgtgcatttc aaaatatttt aatgtggctt ttttgggtgg attattgata
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600
aaaaaaaaa aaaaag
                                                                    616
<210> 190
<211> 677
<212> DNA
<213> Homo sapiens
<400> 190
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accccagaca tgaggaggct cetectggte accageetgg tggttgtget getgtgggag
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gcaggtgcag tcccagcacc caaggtccct atcaagatgc aagtcaaaca ctggccctca
                                                                    180
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gagcaggacc cagagaaggc ctggggcgcc cgtgtggtgg agcctccgga gaaggacgac
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cagctggtgg tgctgttccc tgtccagaag ccgaaactct tgaccaccga ggagaagcca
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cgaggtcagg gcaggggccc catccttcca ggcaccaagg cctggatgga gaccgaggac
                                                                   360
accetgggce gtgtcetgag tecegagece gaccatgaca geetgtacea eceteegeet
                                                                   420
gaggaggacc agggcgagga gaggccccgg ttgtgggtga tgccaaatca ccaggtgctc
                                                                   480
ctgggaccgg aggaagacca agaccccatt ttcccccccc agtaggggtt caggggccat
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ccctgccccc gccctgttcc aaggcccagg ctgttggggc tggggccctc ccttccctgc
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660
aaaaaaaaa aaaaaaa
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<210> 191
<211> 835
<212> DNA
<213> Homo sapiens
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<222> (22)..(22)
<223> n equals a,t,g, or c
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caaagcccca attggcctgg gcctgggcag gaggagctgg gccgggtgcc agatactggg
                                                                  180
atcagecact geageteect gageactete tacagagaeg eggaeceeag acatgaggag 🔩
                                                                  240
gctcctcctg gtcaccagcc tggtggttgt gctgctgtgg gaggcaggtg cagtcccagc
                                                                  300
acccaaggtc cctatcaaga tgcaagtcaa acactggccc tcagagcagg acccagagaa
                                                                  360
ggcctggggc gcccgtgtgg tggagcctcc ggagaaggac gaccagctgg tggtgctgtt
                                                                  420
ccctgtccag aagccgaaac tcttgaccac cgaggagaag ccacgaggtc agggcagggg
                                                                  480
ecceateett ecaggeacca aggeetggat ggagaccgag gacaccetgg geegtgteet
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gagtcccgag cccgaccatg acagcctgta ccaccctccg cctgaggagg accagggcga
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                                                                  660
ccaagaccac atctaccacc cccagtaggg ctccaggggc catcactgcc cccgcctgt
                                                                  720
cccaaggccc aggctgttgg gactgggacc ctccctaccc tgccccagct agacaaataa
                                                                  780
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                                                                  835
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<212> DNA
<213> Homo sapiens
<400> 192
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gccctcagag caggacccag agaaggcctg gggcgcccgt gtggtggagc ctccggagaa
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ggacgaccag ctggtggtgc tgttccctgt ccagaagccg aaactcttga ccaccgagga
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gaagccacga ggcaccaagg cctggatgga gaccgaggac accctgggcc gtgtcctgag
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713
<210> 193
<211> 541
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<212> DNA
<213> Homo sapiens
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gcaccaaggc ctggatggag accgaggaca ccctgggccg tgtcctgagt cccgagcccg
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accatgacag cctgtaccac cctccgcctg aggaggacca gggcgaggag aggccccggt
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                                                                      420
accacccca gtagggctcc aggggccatc actgcccccg ccctgtccca aggcccaggc
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tgttgggact gggaccctcc taccctgccc cagctagaca aataaacccc agcaggccgg
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g
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<213> Homo sapiens
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caatccctcc ttccttcggt ttcaactgga cttctatcag gtctacttcc tggccctggc
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agc
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gacgtgtccg gggcgtcccc gcagaccggg gcagcaggtc gtccgggggc ccaccatgct
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cctcctgtcg gaccgccgcg tgctgctgct gggcaccata caagctctat ttgagagtgt
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cattatette tecagettea tggcagecag cetgettgge tettecetgt acegtatege
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                                                                     1140
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cgtcttctct ctcttcatgt tgactttctc taccagccca ggccaggaga gtccggtgga
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85

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Phe Leu Ala Gly Phe Ser Ser Met Ile Ile Ile Ser Asn Asn Ser Leu 50 55 60

Pro Ile Thr Glu Trp Ile Arg Pro Asn Ser Lys Ala Leu Val Val Ile 65 70 75 80

Leu Ser Ser Gly Ala Leu Ser Ile Gly Gln Ile Ile Leu Gly Gly Leu
85 90 95

Ala Tyr Val Phe Arg Asp Trp Gln Thr Leu His Val Val Ala Ser Val
100 105 110

Pro Phe Phe Val Phe Phe Leu Leu Ser Arg Trp Leu Val Glu Ser Ala 115 120 125

Arg Trp Leu Ile Ile Thr Asn Lys Leu Asp Glu Gly Leu Lys Ala Leu 130 135 140

Arg Lys Val Ala Arg Thr Asn Gly Ile Lys Asn Ala Glu Glu Thr Leu 145 150 155 160

Asn Ile Glu Val Val Arg Ser Thr Met Gln Glu Glu Leu Asp Ala Ala 165 170 175

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Lys Ala 210

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Glu Gly Leu Pro Ala Ala Asp Ala Thr Ala Leu Thr Leu Ala Asn Arg
50 55 60

Asn Leu Glu Arg Leu Pro Gly Cys Leu Pro Arg Thr Leu Arg Ser Leu 65 70 75 80

Asp Ala Ser His Asn Leu Leu Arg Ala Leu Ser Thr Ser Glu Leu Gly 85 90 95

His Leu Glu Gln Leu Gln Val Leu Thr Leu Arg His Asn Arg Ile Ala 100 105 110

Ala Leu Arg Trp Gly Pro Gly Gly Pro Ala Gly Leu His Thr Leu Asp 115 120 125

Leu Ser Tyr Asn Gln Leu Ala Ala Leu Pro Pro Cys Ala Gly Pro Ala 130 135 140

Leu Ser Ser Phe Arg Ala Leu Ala Leu Xaa Arg Asn Pro Leu Arg Ala 145 150 155 160

Leu Gln Pro Arg Ala Phe Ala 165

<210> 207

<211> 196

<212> PRT

<213> Homo sapiens

<400> 207

Met Trp Phe Met Tyr Leu Leu Ser Trp Leu Ser Leu Phe Ile Gln Val 1 5 10 15

Ala Phe Ile Thr Leu Ala Val Ala Ala Gly Leu Tyr Tyr Leu Ala Glu 20 25 30

Leu Ile Glu Glu Tyr Thr Val Ala Thr Ser Arg Ile Ile Lys Tyr Met 35 40 45

Ile Trp Phe Ser Thr Ala Val Leu Ile Gly Leu Tyr Val Phe Glu Arg 50 55 60

Phe Pro Thr Ser Met Ile Gly Val Gly Leu Phe Thr Asn Leu Val Tyr 65 70 75 80

Phe Gly Leu Leu Gln Thr Phe Pro Phe Ile Met Leu Thr Ser Pro Asn 85 90 95

Phe Ile Leu Ser Cys Gly Leu Val Val Val Asn His Tyr Leu Ala Phe 100 105 110

Gln Phe Phe Ala Glu Glu Tyr Tyr Pro Phe Ser Glu Val Leu Ala Tyr 115 120 125

Phe Thr Phe Cys Leu Trp Ile Ile Pro Phe Ala Phe Phe Val Ser Leu 130 135 140

Ser Ala Gly Glu Asn Val Leu Pro Ser Thr Met Gln Pro Gly Asp Asp 145 150 155 160

Val Val Ser Asn Tyr Phe Thr Lys Gly Lys Arg Gly Lys Arg Leu Gly
165 170 175

Ile Leu Val Val Phe Ser Phe Ile Lys Glu Ala Ile Leu Pro Ser Arg 180 185 190

Gln Lys Ile Tyr 195

<210> 208

<211> 84

<212> PRT

<213> Homo sapiens

<400> 208

Met Ser Cys Phe Cys Asp Ile Ile Ser Phe His Ser Leu Ser Trp Ser 1 5 10 15

Leu Val Leu Leu Leu Leu Lys Pro Pro Thr Leu Ser Thr Ser Gly
20 25 30

Ser Leu Tyr Lys Phe Ser Leu Leu Ala Thr Phe Pro Pro Gln Ile Phe 35 40 45

His Ile Ile Asn Val Ser Val Tyr Met Leu Pro Pro Glu Arg Gly Leu 50 60

His Trp Leu Phe Phe Asn Ser Thr Ser Thr Gln Ile Cys Ser Val 65 70 75 80

His Pro Leu Gln

<210> 209

<211> 400

<212> PRT <213> Homo sapiens

<400> 209

Met Ala Trp Arg Arg Glu Ala Ser Val Gly Ala Arg Gly Val Leu

1 5 10 15

Ala Leu Ala Leu Leu Ala Leu Cys Val Pro Gly Ala Arg Gly
20 25 30

Arg Ala Leu Glu Trp Phe Ser Ala Val Val Asn Ile Glu Tyr Val Asp 35 40 45

Pro Gln Thr Asn Leu Thr Val Trp Ser Val Ser Glu Ser Gly Arg Phe 50 55 60

Gly Asp Ser Ser Pro Lys Glu Gly Ala His Gly Leu Val Gly Val Pro 65 70 75 80

Trp Ala Pro Gly Gly Asp Leu Glu Gly Cys Ala Pro Asp Thr Arg Phe
85 90 95

Phe Val Pro Glu Pro Gly Gly Arg Gly Ala Ala Pro Trp Val Ala Leu 100 105 110

Val Ala Arg Gly Cys Thr Phe Lys Asp Lys Val Leu Val Ala Ala 115 120 125

Arg Arg Asn Ala Ser Ala Val Val Leu Tyr Asn Glu Glu Arg Tyr Gly 130 135 140

Asn Ile Thr Leu Pro Met Ser His Ala Gly Thr Gly Asn Ile Val Val 145 150 155 160

Ile Met Ile Ser Tyr Pro Lys Gly Arg Glu Ile Leu Glu Leu Val Gln
165 170 175

Lys Gly Ile Pro Val Thr Met Thr Ile Gly Val Gly Thr Arg His Val
180 185 190

Gln Glu Phe Ile Ser Gly Gln Ser Val Val Phe Val Ala Ile Ala Phe 195 200 205

Ile Thr Met Met Ile Ile Ser Leu Ala Trp Leu Ile Phe Tyr Tyr Ile 210 215 220

Gln Arg Phe Leu Tyr Thr Gly Ser Gln Ile Gly Ser Gln Ser His Arg 225 230 235 240

Lys Glu Thr Lys Lys Val Ile Gly Gln Leu Leu His Thr Val Lys 245 250 255

His Gly Glu Lys Gly Ile Asp Val Asp Ala Glu Asn Cys Ala Val Cys 260 265 270

Ile Glu Asn Phe Lys Val Lys Asp Ile Ile Arg Ile Leu Pro Cys Lys 275 280 285

His Ile Phe His Arg Ile Cys Ile Asp Pro Trp Leu Leu Asp His Arg 290 295 300

Thr Cys Pro Met Cys Lys Leu Asp Val Ile Lys Ala Leu Gly Tyr Trp 305 310 315 320

Gly Glu Pro Gly Asp Val Gln Glu Met Pro Ala Pro Glu Ser Pro Pro 325 330 335

Gly Arg Asp Pro Ala Ala Asn Leu Ser Leu Ala Leu Pro Asp Asp Asp 340 345 350

Gly Ser Asp Glu Ser Ser Pro Pro Ser Ala Ser Pro Ala Glu Ser Glu 355 360 365

Pro Gln Cys Asp Pro Ser Phe Lys Gly Asp Ala Gly Glu Asn Thr Ala 370 375 380

Leu Leu Glu Ala Gly Arg Ser Asp Ser Arg His Gly Gly Pro Ile Ser 385 390 395 400

<210> 210

<211> 125

<212> PRT

<213> Homo sapiens

<400> 210

Met Thr Ser Phe Leu Lys Pro Ser Pro Pro Met Ala Ser Met Ser Ser  $1 \cdot 5$  10 15

Pro Leu Trp Val Cys Leu Phe Thr Ser Gly Cys Ser Leu Ser Val Ser 20 25 30

Ser Met Gly Ser Ser Ser Ser Cys Ser His Thr Asn His Leu Ala Ala 35 40 45

Ser Arg Thr Tyr His Gly Leu Cys His Met Leu Phe Pro Leu Phe Arg 50 55 60

Met Val Ser Ser Pro Ser Leu Cys Leu Ala Asn Ser Ser Ser Phe 65 70 75 80

Ser Ser Pro Leu Ile Leu Asn Val Phe Arg Glu Ala Ser Leu Asp Leu 85 90 95

Leu Val Arg Ser His Phe Leu Val Ile Tyr Ser Phe Ile Ala Leu Ser 100 105 110

Leu Gly Ala Thr Ser Pro Ser Leu Val Trp Leu Leu Glu
115 120 125

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<210> 211
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<211> 294

<212> PRT

<213> Homo sapiens

## <400> 211

Met Arg Pro Arg Ala Pro Ala Cys Ala Ala Ala Leu Gly Leu Cys
1 5 10 15

Ser Leu Leu Leu Leu Ala Pro Gly His Ala Cys Pro Ala Gly Cys 20 25 30

Ala Cys Thr Asp Pro His Thr Val Asp Cys Arg Asp Arg Gly Leu Pro
35 40 45

Ser Val Pro Asp Pro Phe Pro Leu Asp Val Arg Lys Leu Leu Val Ala 50 55 60

Gly Asn Arg Ile Gln Arg Ile Pro Glu Asp Phe Phe Ile Phe Tyr Gly 65 70 75 80

Asp Leu Val Tyr Leu Asp Phe Arg Asn Asn Ser Leu Arg Ser Leu Glu 85 90 95

Glu Gly Thr Phe Ser Gly Ser Ala Lys Leu Val Phe Leu Asp Leu Ser 100 105 110

Tyr Asn Asn Leu Thr Gln Leu Gly Ala Gly Ala Phe Arg Ser Ala Gly 115 120 125

Arg Leu Val Lys Leu Ser Leu Ala Asn Asn Asn Val Val Gly Val His 130 135 140

Glu Asp Ala Phe Glu Thr Leu Glu Ser Leu Gln Val Leu Glu Leu Asn 145 150 155 160

Asp Asn Asn Leu Arg Ser Leu Ser Val Ala Ala Leu Ala Ala Leu Pro 165 170 175

Ala Leu Arg Ser Leu Arg Leu Asp Gly Asn Pro Trp Leu Cys Asp Cys 180 185 190

Asp Phe Ala His Leu Phe Ser Trp Ile Gln Glu Asn Ala Ser Lys Leu 195 200 205

Pro Lys Gly Leu Asp Glu Ile Gln Cys Ser Leu Pro Met Glu Ser Arg 210 215 220

Arg Ile Ser Leu Arg Glu Leu Ser Glu Ala Ser Phe Ser Glu Cys Arg 225 230 235 240

Phe Ser Leu Ser Leu Thr Asp Leu Cys Ile Ile Ile Phe Ser Gly Val 245 250 255

Ala Val Ser Ile Ala Ala Ile Ile Ser Ser Phe Phe Leu Ala Thr Val

260 265 270

Val Gln Cys Leu Gln Arg Cys Ala Pro Asn Lys Asp Ala Glu Asp Glu 275 280 285

Asp Glu Asp Glu Asp Asp 290

<210> 212

<211> 283

<212> PRT

<213> Homo sapiens

<400> 212

Met Val Ser Ala Ala Ala Pro Ser Leu Leu Ile Leu Leu Leu Leu Leu 1 5 10 15

Leu Gly Ser Val Pro Ala Thr Asp Ala Arg Ser Val Pro Leu Lys Ala
20 25 30

Thr Phe Leu Glu Asp Val Ala Gly Ser Gly Glu Ala Glu Gly Ser Ser 35 40 45

Ala Ser Ser Pro Ser Leu Pro Pro Pro Trp Thr Pro Ala Leu Ser Pro 50 55 60

Thr Ser Met Gly Pro Gln Pro Thr Thr Leu Gly Gly Pro Ser Pro Pro 65 70 75 80

Thr Asn Phe Leu Asp Gly Ile Val Asp Phe Phe Arg Gln Tyr Val Met . 85 90 95

Leu Ile Ala Val Val Gly Ser Leu Ala Phe Leu Leu Met Phe Ile Val 100 105 110

Cys Ala Ala Val Ile Thr Arg Gln Lys Gln Lys Ala Ser Ala Tyr Tyr 115 120 125

Pro Ser Ser Phe Pro Lys Lys Lys Tyr Val Asp Gln Ser Asp Arg Ala 130 135 140

Arg Pro Glu Glu Ala Leu Asp Ser Ser Arg Gln Leu Gln Ala Asp Ile 165 170 175

Leu Ala Ala Thr Gln Asn Leu Lys Ser Pro Thr Arg Ala Ala Leu Gly
180 185 190

Gly Gly Asp Gly Ala Arg Met Val Glu Gly Arg Gly Ala Glu Glu Glu 195 200 205

Glu Lys Gly Ser Gln Glu Gly Asp Gln Glu Val Gln Gly His Gly Val 210 215 220 Pro Val Glu Thr Pro Glu Ala Gln Glu Glu Pro Cys Ser Gly Val Leu 225 230 235 240

Glu Gly Ala Val Val Ala Gly Glu Gly Glu Gly Glu Leu Glu Gly Ser 245 250 255

Leu Leu Ala Gln Glu Ala Gln Gly Pro Val Gly Pro Pro Glu Ser
260 265 270

Pro Cys Ala Cys Ser Ser Val His Pro Ser Val 275 280

<210> 213

<211> 396

<212> PRT

<213> Homo sapiens

<400> 213

Met Ser Ala Thr Asp Arg Met Gly Pro Arg Ala Val Pro Gly Leu Arg
1 5 10 15

Leu Ala Leu Leu Leu Leu Val Leu Gly Thr Pro Lys Ser Gly Val
20 25 30

Gln Gly Gln Glu Leu Asp Phe Pro Glu Tyr Asp Gly Val Asp Arg
35 40 45

Val Ile Asn Val Asn Ala Lys Asn Tyr Lys Asn Val Phe Lys Lys Tyr 50 55 60

Glu Val Leu Ala Leu Leu Tyr His Glu Pro Pro Glu Asp Asp Lys Ala 65 70 75 80

Ser Gln Arg Gln Phe Glu Met Glu Glu Leu Ile Leu Glu Leu Ala Ala 85 90 95

Gln Val Leu Glu Asp Lys Gly Val Gly Phe Gly Leu Val Asp Ser Glu
100 105 110

Lys Asp Ala Ala Val Ala Lys Lys Leu Gly Leu Thr Glu Val Asp Ser 115 120 125

Met Tyr Val Phe Lys Gly Asp Glu Val Ile Glu Tyr Asp Gly Glu Phe 130 135 140

Ser Ala Asp Thr Ile Val Glu Phe Leu Leu Asp Val Leu Glu Asp Pro 145 150 155 160

Val Glu Leu Ile Glu Gly Glu Arg Glu Leu Gln Ala Phe Glu Asn Ile 165 170 175

Glu Asp Glu Ile Lys Leu Ile Gly Tyr Phe Lys Ser Lys Asp Ser Glu 180 185 190 His Tyr Lys Ala Phe Glu Asp Ala Ala Glu Glu Phe His Pro Tyr Ile 195 200 205

Pro Phe Phe Ala Thr Phe Asp Ser Lys Val Ala Lys Lys Leu Thr Leu 210 215 220

Lys Leu Asn Glu Ile Asp Phe Tyr Glu Ala Phe Met Glu Glu Pro Val 225 230 235 240

Thr Ile Pro Asp Lys Pro Asn Ser Glu Glu Glu Ile Val Asn Phe Val
245 250 255

Glu Glu His Arg Arg Ser Thr Leu Arg Lys Leu Lys Pro Glu Ser Met 260 265 270

Tyr Glu Thr Trp Glu Asp Asp Met Asp Gly Ile His Ile Val Ala Phe 275 280 285

Ala Glu Glu Ala Asp Pro Asp Gly Phe Glu Phe Leu Glu Thr Leu Lys 290 295 300

Ala Val Ala Gln Asp Asn Thr Glu Asn Pro Asp Leu Ser Ile Ile Trp 305 310 315 320

Ile Asp Pro Asp Asp Phe Pro Leu Leu Val Pro Tyr Trp Glu Lys Thr
325 330 335

Phe Asp Ile Asp Leu Ser Ala Pro Gln Ile Gly Val Val Asn Val Thr 340 345 350

Asp Ala Asp Ser Val Trp Met Glu Met Asp Asp Glu Glu Asp Leu Pro 355 360 365

Ser Ala Glu Glu Leu Glu Asp Trp Leu Glu Asp Val Leu Glu Gly Glu 370 375 380

Ile Asn Thr Glu Asp Asp Asp Asp Asp Asp Asp 385 390 395

<210> 214

<211> 672

<212> PRT

<213> Homo sapiens

<400> 214

Met Gln Lys Ala Ser Val Leu Leu Phe Leu Ala Trp Val Cys Phe Leu
1 10 15

Phe Tyr Ala Gly Ile Ala Leu Phe Thr Ser Gly Phe Leu Leu Thr Arg
20 25 30

Leu Glu Leu Thr Asn His Ser Ser Cys Gln Glu Pro Pro Gly Pro Gly 35 40 45

Ser Leu Pro Trp Gly Ser Gln Gly Lys Pro Gly Ala Cys Trp Met Ala

50	55	60

Ser Arg Phe Ser Arg Val Val Leu Val Leu Ile Asp Ala Leu Arg Phe Asp Phe Ala Gln Pro Gln His Ser His Val Pro Arg Glu Pro Pro Val Ser Leu Pro Phe Leu Gly Lys Leu Ser Ser Leu Gln Arg Ile Leu Glu Ile Gln Pro His His Ala Arg Leu Tyr Arg Ser Gln Val Asp Pro Pro 120 Thr Thr Met Gln Arg Leu Lys Ala Leu Thr Thr Gly Ser Leu Pro 135 Thr Phe Ile Asp Ala Gly Ser Asn Phe Ala Ser His Ala Ile Val Glu 155 Asp Asn Leu Ile Lys Gln Leu Thr Ser Ala Gly Arg Arg Val Val Phe Met Gly Asp Asp Thr Trp Lys Asp Leu Phe Pro Gly Ala Phe Ser Lys 185 Ala Phe Phe Pro Ser Phe Asn Val Arg Asp Leu Asp Thr Val Asp 195 200 Asn Gly Ile Leu Glu His Leu Tyr Pro Thr Met Asp Ser Gly Glu Trp 215 220 Asp Val Leu Ile Ala His Phe Leu Gly Val Asp His Cys Gly His Lys His Gly Pro His His Pro Glu Met Ala Lys Lys Leu Ser Gln Met Asp Gln Val Ile Gln Gly Leu Val Glu Arg Leu Glu Asn Asp Thr Leu Leu Val Val Ala Gly Asp His Gly Met Thr Thr Asn Gly Asp His Gly Gly Asp Ser Glu Leu Glu Val Ser Ala Ala Leu Phe Leu Tyr Ser Pro Thr Ala Val Phe Pro Ser Thr Pro Pro Glu Glu Pro Glu Val Ile Pro Gln 310 Val Ser Leu Val Pro Thr Leu Ala Leu Leu Gly Leu Pro Ile Pro Phe Gly Asn Ile Gly Glu Val Met Ala Glu Leu Phe Ser Gly Glu Glu 340 345 350 Asp Ser Gln Pro His Ser Ser Ala Leu Ala Gln Ala Ser Ala Leu His

355 360 365

Leu Asn Ala Gln Gln Val Ser Arg Phe Leu His Thr Tyr Ser Ala Ala 370 375 380 Thr Gln Asp Leu Gln Ala Lys Glu Leu His Gln Leu Gln Asn Leu Phe 395 Ser Lys Ala Ser Ala Asp Tyr Gln Trp Leu Leu Gln Ser Pro Lys Gly Ala Glu Ala Thr Leu Pro Thr Val Ile Ala Glu Leu Gln Gln Phe Leu 425 Arg Gly Ala Arg Ala Met Cys Ile Glu Ser Trp Ala Arg Phe Ser Leu Ser Phe Leu Leu His Leu Leu Ala Ala Gly Ile Pro Val Thr Thr 455 Pro Gly Pro Phe Thr Val Pro Trp Gln Ala Val Ser Ala Trp Ala Leu 470 Met Ala Thr Gln Thr Phe Tyr Ser Thr Gly His Gln Pro Val Phe Pro 490 Ala Ile His Trp His Ala Ala Phe Val Gly Phe Pro Glu Gly His Gly 505 Ser Cys Thr Trp Leu Pro Ala Leu Leu Val Gly Ala Asn Thr Phe Ala 520 Ser His Leu Leu Phe Ala Val Gly Cys Pro Leu Leu Leu Trp Pro Phe Leu Cys Glu Ser Gln Gly Leu Arg Lys Arg Gln Gln Pro Pro Gly 555 Asn Glu Ala Asp Ala Arg Val Arg Pro Glu Glu Glu Glu Pro Leu Met Glu Met Arg Leu Arg Asp Ala Pro Gln His Phe Tyr Ala Ala Leu 585 Leu Gln Leu Gly Leu Lys Tyr Leu Phe Ile Leu Gly Ile Gln Ile Leu Ala Cys Ala Leu Ala Ala Ser Ile Leu Arg Arg His Leu Met Val Trp Lys Val Phe Ala Pro Lys Phe Ile Phe Glu Ala Val Gly Phe Ile Val Ser Ser Val Gly Leu Leu Gly Ile Ala Leu Val Met Arg Val Asp

Gly Ala Val Ser Ser Trp Phe Arg Gln Leu Phe Leu Ala Gln Gln Arg

660 665 670

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<210> 215
<211> 160
<212> PRT
<213> Homo sapiens
<400> 215
Met Glu Gly Ala Glu Leu Ala Gly Lys Ile Leu Ser Thr Trp Leu Thr
                                     10
Leu Val Leu Gly Phe Ile Leu Leu Pro Ser Val Phe Gly Val Ser Leu
Gly Ile Ser Glu Ile Tyr Met Lys Ile Leu Val Lys Thr Leu Glu Trp
Ala Thr Ile Arg Ile Glu Lys Gly Thr Pro Lys Glu Ser Ile Leu Lys
Asn Ser Ala Ser Val Gly Ile Ile Gln Arg Asp Glu Ser Pro Met Glu
Lys Gly Leu Ser Gly Leu Arg Gly Arg Asp Phe Glu Leu Ser Asp Val
Phe Tyr Phe Ser Lys Lys Gly Leu Glu Ala Ile Val Glu Asp Glu Val
                                105
Thr Gln Arg Phe Ser Ser Glu Glu Leu Val Ser Trp Asn Leu Leu Thr
                            120
Arg Thr Asn Val Asn Phe Gln Tyr Ile Ser Leu Arg Leu Thr Met Val
                       135
Trp Val Leu Gly Val Ile Val Arg Tyr Cys Val Leu Leu Pro Leu Arg
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<210> 216

<211> 215

<212> PRT

<213> Homo sapiens

<400> 216

Met Gly Leu Glu Lys Pro Gln Ser Lys Leu Glu Gly Gly Met His Pro  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Gln Leu Ile Pro Ser Val Ile Ala Val Val Phe Ile Leu Leu Ser 20 25 30

Val Cys Phe Ile Ala Ser Cys Leu Val Thr His His Asn Phe Ser Arg 35 40 45

Cys Lys Arg Gly Thr Gly Val His Lys Leu Glu His His Ala Lys Leu 50 60

Lys Cys Ile Lys Glu Lys Ser Glu Leu Lys Ser Ala Glu Gly Ser Thr 65 70 75 80

Trp Asn Cys Cys Pro Ile Asp Trp Arg Ala Phe Gln Ser Asn Cys Tyr 85 90 95

Phe Pro Leu Thr Asp Asn Lys Thr Trp Ala Glu Ser Glu Arg Asn Cys
100 105 110

Ser Gly Met Gly Ala His Leu Met Thr Ile Ser Thr Glu Ala Glu Gln 115 120 125

Asn Phe Ile Ile Gln Phe Leu Asp Arg Leu Ser Tyr Phe Leu Gly 130 135 140

Leu Arg Asp Glu Asn Ala Lys Gly Gln Trp Arg Trp Val Asp Gln Thr 145 150 155 160

Pro Phe Asn Pro Arg Arg Val Phe Trp His Lys Asn Glu Pro Asp Asn 165 170 175

Ser Gln Gly Glu Asn Cys Val Val Leu Val Tyr Asn Gln Asp Lys Trp 180 185 190

Ala Trp Asn Asp Val Pro Cys Asn Phe Glu Ala Ser Arg Ile Cys Lys 195 200 205

Ile Pro Gly Thr Thr Leu Asn 210 215

<210> 217

<211> 535

<212> PRT

<213> Homo sapiens

<400> 217

Met Lys Leu Trp Val Ser Ala Leu Leu Met Ala Trp Phe Gly Val Leu
1 10 15

Ser Cys Val Gln Ala Glu Phe Phe Thr Ser Ile Gly His Met Thr Asp 20 25 30

Leu Ile Tyr Ala Glu Lys Glu Leu Val Gln Ser Leu Lys Glu Tyr Ile
35 40 45

Leu Val Glu Glu Ala Lys Leu Ser Lys Ile Lys Ser Trp Ala Asn Lys

- Met Glu Ala Leu Thr Ser Lys Ser Ala Ala Asp Ala Glu Gly Tyr Leu 65 70 75 80

  Ala His Pro Val Asn Ala Tyr Lys Leu Val Lys Arg Leu Asn Thr Asp 85 90 95
- Trp Pro Ala Leu Glu Asp Leu Val Leu Gln Asp Ser Ala Ala Gly Phe 100 105 110
- Ile Ala Asn Leu Ser Val Gln Arg Gln Phe Phe Pro Thr Asp Glu Asp 115 120 125
- Glu Ile Gly Ala Ala Lys Ala Leu Met Arg Leu Gln Asp Thr Tyr Arg 130 135 140
- Leu Asp Pro Gly Thr Ile Ser Arg Gly Glu Leu Pro Gly Thr Lys Tyr 145 150 155 160
- Gln Ala Met Leu Ser Val Asp Asp Cys Phe Gly Met Gly Arg Ser Ala 165 170 175
- Tyr Asn Glu Gly Asp Tyr Tyr His Thr Val Leu Trp Met Glu Gln Val
  180 185 190
- Leu Lys Gln Leu Asp Ala Gly Glu Glu Ala Thr Thr Lys Ser Gln 195 200 205
- Val Leu Asp Tyr Leu Ser Tyr Ala Val Phe Gln Leu Gly Asp Leu His 210 215 220
- Arg Ala Leu Glu Leu Thr Arg Arg Leu Leu Ser Leu Asp Pro Ser His 225 230 235 240
- Glu Arg Ala Gly Gly Asn Leu Arg Tyr Phe Glu Gln Leu Leu Glu Glu 245 250 255
- Glu Arg Glu Lys Thr Leu Thr Asn Gln Thr Glu Ala Glu Leu Ala Thr 260 265 270
- Pro Glu Gly Ile Tyr Glu Arg Pro Val Asp Tyr Leu Pro Glu Arg Asp 275 280 285
- Val Tyr Glu Ser Leu Cys Arg Gly Glu Gly Val Lys Leu Thr Pro Arg 290 295 300
- Arg Gln Lys Arg Leu Phe Cys Arg Tyr His His Gly Asn Arg Ala Pro 305 310 315 320
- Gln Leu Leu Ile Ala Pro Phe Lys Glu Glu Asp Glu Trp Asp Ser Pro 325 330 335
- His Ile Val Arg Tyr Tyr Asp Val Met Ser Asp Glu Glu Ile Glu Arg 340 345 350
- Ile Lys Glu Ile Ala Lys Pro Lys Leu Ala Arg Ala Thr Val Arg Asp

355 360 365

Pro Lys Thr Gly Val Leu Thr Val Ala Ser Tyr Arg Val Ser Lys Ser 370 380

Ser Trp Leu Glu Glu Asp Asp Pro Val Val Ala Arg Val Asn Arg 385 390 395 400

Arg Met Gln His Ile Thr Gly Leu Thr Val Lys Thr Ala Glu Leu Leu
405 410 415

Gln Val Ala Asn Tyr Gly Val Gly Gly Gln Tyr Glu Pro His Phe Asp 420 425 430

Phe Ser Arg Asn Asp Glu Arg Asp Thr Phe Lys His Leu Gly Thr Gly 435 440 445

Asn Arg Val Ala Thr Phe Leu Asn Tyr Met Ser Asp Val Glu Ala Gly 450 455 460

Gly Ala Thr Val Phe Pro Asp Leu Gly Ala Ala Ile Trp Pro Lys Lys 465 470 475 480

Gly Thr Ala Val Phe Trp Tyr Asn Leu Leu Arg Ser Gly Glu Gly Asp 485 490 495

Tyr Arg Thr Arg His Ala Ala Cys Pro Val Leu Val Gly Cys Lys Trp 500 505 510

Val Ser Asn Lys Trp Phe His Glu Arg Gly Gln Glu Phe Leu Arg Pro 515 520 525

Cys Gly Ser Thr Glu Val Asp 530 535

<210> 218

<211> 314

<212> PRT

<213> Homo sapiens

<400> 218

Met Ser Phe Leu Cys Ser Trp Leu Leu Phe Ala Met Ala Trp Trp Leu 1 5 10 15

Ile Ala Phe Ala His Gly Asp Leu Ala Pro Ser Glu Gly Thr Ala Glu 20 25 30

Pro Cys Val Thr Ser Ile His Ser Phe Ser Ser Ala Phe Leu Phe Ser 35 40 45

Ile Glu Val Gln Val Thr Ile Gly Phe Gly Gly Arg Met Val Thr Glu
50 55 60

Glu Cys Pro Leu Ala Ile Leu Ile Leu Ile Val Gln Asn Ile Val Gly 65 70 75 80

Leu Met Ile Asn Ala Ile Met Leu Gly Cys Ile Phe Met Lys Thr Ala 85 90 95

Gln Ala His Arg Arg Ala Glu Thr Leu Ile Phe Ser Lys His Ala Val 100 105 110

Ile Ala Leu Arg His Gly Arg Leu Cys Phe Met Leu Arg Val Gly Asp 115 120 125

Leu Arg Lys Ser Met Ile Ile Ser Ala Thr Ile His Met Gln Val Val 130 135 140

Arg Lys Thr Thr Ser Pro Glu Gly Glu Val Val Pro Leu His Gln Val
145 150 155 160

Asp Ile Pro Met Glu Asn Gly Val Gly Gly Asn Ser Ile Phe Leu Val 165 170 175

Ala Pro Leu Ile Ile Tyr His Val Ile Asp Ala Asn Ser Pro Leu Tyr 180 185 190

Asp Leu Ala Pro Ser Asp Leu His His His Gln Asp Leu Glu Ile Ile
195 200 205

Val Ile Leu Glu Gly Val Val Glu Thr Thr Gly Ile Thr Thr Gln Ala 210 215 220

Arg Thr Ser Tyr Leu Ala Asp Glu Ile Leu Trp Gly Gln Arg Phe Val 225 230 235 240

Pro Ile Val Ala Glu Glu Asp Gly Arg Tyr Ser Val Asp Tyr Ser Lys 245 250 255

Phe Gly Asn Thr Ile Lys Val Pro Thr Pro Leu Cys Thr Ala Arg Gln 260 265 270

Leu Asp Glu Asp His Ser Leu Leu Glu Ala Leu Thr Leu Ala Ser Ala 275 280 285

Arg Gly Pro Leu Arg Lys Arg Ser Val Pro Met Ala Lys Ala Lys Pro 290 295 300

Lys Phe Ser Ile Ser Pro Asp Ser Leu Ser 305

<210> 219

<211> 97

<212> PRT

<213> Homo sapiens

<400> 219

Met Ala Leu Pro Leu Arg Pro Leu Thr Arg Gly Leu Ala Ser Ala Ala 1 5 10 15

Lys Gly Gly His Gly Gly Ala Gly Ala Arg Thr Trp Arg Leu Leu Thr 20 25 30

Phe Val Leu Ala Leu Pro Ser Val Ala Leu Cys Thr Phe Asn Ser Tyr 35 40 45

Leu His Ser Gly His Arg Pro Arg Pro Glu Phe Arg Pro Tyr Gln His
50 55 60

Leu Arg Ile Arg Thr Lys Pro Tyr Pro Trp Gly Asp Gly Asn His Thr 65 70 75 80

Leu Phe His Asn Ser His Val Asn Pro Leu Pro Thr Gly Tyr Glu His
85 90 95

Pro

<210> 220

<211> 218

<212> PRT

<213> Homo sapiens

<400> 220

Met Thr Gln Pro Val Pro Arg Leu Ser Val Pro Ala Ala Leu Ala Leu 1 5 10 15

Gly Ser Ala Ala Leu Gly Ala Ala Phe Ala Thr Gly Leu Phe Leu Ala
20 25 30

Asp Pro Gly Ala Ala Gly Gly Phe Tyr Asp Asp Leu Arg Ala Gly 35 40 45

Pro Ala Leu Gly Gln Pro Gly Ala Ala His Pro Gly Gln Glu Gly Ala
50 . 55 60

Gly Pro Gly His Leu His Gly Leu Leu Arg Pro Gly Pro Gly Pro Gly 65 70 75 80

Ala Ala Arg Gly Arg Ala Arg Gly Asp Leu Arg Gly Gly Arg Ala Ala 85 90 95

Pro Gly Ala Gly Thr Ala Pro Val Glu Ala Glu Ala Glu His Lys Ile 100 105 110

Asp Leu Arg Leu Lys Pro Ala Leu Glu Thr Leu Asp Glu Leu Leu Ala 115 120 125

Ala Gly Glu Ala Gly Thr Phe Asp Val Ala Val Val Asp Ala Asp Lys 130 135 140

Glu Asn Cys Ser Ala Tyr Tyr Glu Arg Cys Leu Gln Leu Leu Arg Pro
145 150 155 160

Gly Gly Ile Leu Ala Val Leu Arg Val Leu Trp Arg Gly Lys Val Leu

165 170 175

Gln Pro Pro Lys Gly Asp Val Ala Ala Glu Cys Val Arg Asn Leu Asn 180 185 190

Glu Arg Ile Arg Arg Asp Val Arg Val Tyr Ile Ser Leu Leu Pro Leu 195 200 205

Gly Asp Gly Leu Thr Leu Ala Phe Lys Ile 210 215

<210> 221

<211> 83

<212> PRT

<213> Homo sapiens

<400> 221

Met Pro Leu Trp Val Phe Leu Phe Leu Trp Ala Pro Gln Thr Leu Ala 1 5 10 15

Ala Thr Ala Arg Lys Leu Glu Arg Asn Gln Ile Glu Phe Ala Leu Lys 20 25 30

Cys Phe Tyr Gly Asp Lys Met Ile Thr Lys Arg Lys Glu Val Gly Asn  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Arg Gly Arg Ala Arg Trp Leu Thr Pro Val Ile Pro Ala Ile Trp Glu 50 60

Val Glu Val Gly Gly Ser Pro Glu Val Arg Arg Ser Arg Pro Ala Trp
65 70 75 80

Pro Ile Trp

<210> 222

<211> 672

<212> PRT

<213> Homo sapiens

<400> 222

Met Gln Lys Ala Ser Val Leu Leu Phe Leu Ala Trp Val Cys Phe Leu 1 5 10 15

Phe Tyr Ala Gly Ile Ala Leu Phe Thr Ser Gly Phe Leu Leu Thr Arg
20 25 30

Leu Glu Leu Thr Asn His Ser Ser Cys Gln Glu Pro Pro Gly Pro Gly 35 40 45

Ser Leu Pro Trp Gly Ser Gln Gly Lys Pro Gly Ala Cys Trp Met Ala 50 55 60

Ser Arg Phe Ser Arg Val Val Leu Val Leu Ile Asp Ala Leu Arg Phe Asp Phe Ala Gln Pro Gln His Ser His Val Pro Arg Glu Pro Pro Val Ser Leu Pro Phe Leu Gly Lys Leu Ser Ser Leu Gln Arg Ile Leu Glu Ile Gln Pro His His Ala Arg Leu Tyr Arg Ser Gln Val Asp Pro Pro Thr Thr Thr Met Gln Arg Leu Lys Ala Leu Thr Thr Gly Ser Leu Pro Thr Phe Ile Asp Ala Gly Ser Asn Phe Ala Ser His Ala Ile Val Glu 150 155 Asp Asn Leu Ile Lys Gln Leu Thr Ser Ala Gly Arg Arg Val Val Phe Met Gly Asp Asp Thr Trp Lys Asp Leu Phe Pro Gly Ala Phe Ser Lys 185 Ala Phe Phe Pro Ser Phe Asn Val Arg Asp Leu Asp Thr Val Asp 195 Asn Gly Ile Leu Glu His Leu Tyr Pro Thr Met Asp Ser Gly Glu Trp 215 Asp Val Leu Ile Ala His Phe Leu Gly Val Asp His Cys Gly His Lys 230 240 His Gly Pro His His Pro Glu Met Ala Lys Lys Leu Ser Gln Met Asp 250 Gln Val Ile Gln Gly Leu Val Glu Arg Leu Glu Asn Asp Thr Leu Leu Val Val Ala Gly Asp His Gly Met Thr Thr Asn Gly Asp His Gly Gly Asp Ser Glu Leu Glu Val Ser Ala Ala Leu Phe Leu Tyr Ser Pro Thr Ala Val Phe Pro Ser Thr Pro Pro Glu Glu Pro Glu Val Ile Pro Gln 310 315 Val Ser Leu Val Pro Thr Leu Ala Leu Leu Gly Leu Pro Ile Pro 330 Phe Gly Asn Ile Gly Glu Val Met Ala Glu Leu Phe Ser Gly Gly Glu Asp Ser Gln Pro His Ser Ser Ala Leu Ala Gln Ala Ser Ala Leu His 355 360

- Leu Asn Ala Gln Gln Val Ser Arg Phe Leu His Thr Tyr Ser Ala Ala 370 380
- Thr Gln Asp Leu Gln Ala Lys Glu Leu His Gln Leu Gln Asn Leu Phe 385 390 395 400
- Ser Lys Ala Ser Ala Asp Tyr Gln Trp Leu Leu Gln Ser Pro Lys Gly
  405 410 415
- Ala Glu Ala Thr Leu Pro Thr Val Ile Ala Glu Leu Gln Gln Phe Leu
  420 425 430
- Arg Gly Ala Arg Ala Met Cys Ile Glu Ser Trp Ala Arg Phe Ser Leu 435 440 445
- Ser Phe Leu Leu His Leu Leu Ala Ala Gly Ile Pro Val Thr Thr 450 455 460
- Pro Gly Pro Phe Thr Val Pro Trp Gln Ala Val Ser Ala Trp Ala Leu 465 470 475 480
- Met Ala Thr Gln Thr Phe Tyr Ser Thr Gly His Gln Pro Val Phe Pro
  485 490 495
- Ala Ile His Trp His Ala Ala Phe Val Gly Phe Pro Glu Gly His Gly 500 510
- Ser Cys Thr Trp Leu Pro Ala Leu Leu Val Gly Ala Asn Thr Phe Ala 515 520 525
- Ser His Leu Leu Phe Ala Val Gly Cys Pro Leu Leu Leu Leu Trp Pro 530 540
- Phe Leu Cys Glu Ser Gln Gly Leu Arg Lys Arg Gln Gln Pro Pro Gly 545 550 555 560
- Asn Glu Ala Asp Ala Arg Val Arg Pro Glu Glu Glu Glu Glu Pro Leu
  565 570 575
- Met Glu Met Arg Leu Arg Asp Ala Pro Gln His Phe Tyr Ala Ala Leu 580 585 590
- Leu Gln Leu Gly Leu Lys Tyr Leu Phe Ile Leu Gly Ile Gln Ile Leu 595 600 605
- Ala Cys Ala Leu Ala Ala Ser Ile Leu Arg Arg His Leu Met Val Trp 610 620
- Lys Val Phe Ala Pro Lys Phe Ile Phe Glu Ala Val Gly Phe Ile Val 625 630 635 640
- Ser Ser Val Gly Leu Leu Gly Ile Ala Leu Val Met Arg Val Asp 645 650 655
- Gly Ala Val Ser Ser Trp Phe Arg Gln Leu Phe Leu Ala Gln Gln Arg
  660 665 670

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<210> 223
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<211> 109

<212> PRT

<213> Homo sapiens

<400> 223

Met Leu Ser Leu Pro Trp Ala Phe Leu Ser Val Met Phe Ser Phe Ser 1 5 10 15

Cys Ser Phe Ser Asp Phe Ser Cys Leu Cys Cys Ser Gln Ala Cys Pro 20 25 30

Ser Val Ser Thr Asp Thr Gln Cys Leu Val Ser Gly Gln Leu Arg Gly 35 40 45

Gly Gly Phe Lys Gln Asn Ser Asp Ser Leu Gly Trp Gly Ile Arg Asn 50 55 60

Trp Gly Lys Leu Asn Asp Pro Glu Ile Pro Pro Arg Gly Val Ser Gly 65 70 75 80

Arg Ile Cys Ala Trp Thr Val Ala Glu Pro Phe Gln Cys Ser Phe Gly 85 90 95

Ser Asp Phe Ile Ser Leu Asn Lys Val Pro Ile Ser Leu
100 105

<210> 224

<211> 90

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (89)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 224

Met Leu Pro Gln His Arg Trp Trp Ser Met Cys Pro Tyr Leu Cys Ala 1 5 10 15

Cys Leu Gly Leu Ala Ser Cys Leu Ile Pro Ile Ile Pro Ala Leu Trp 20 25 30

Glu Ala Glu Ala Gly Gly Ser Leu Glu Ala Arg Ser Leu Arg Pro Thr 35 40 45

Arg Thr Ala Trp Ser Pro Gln Glu Ala Cys Arg Ala Gln Ala Pro Pro 50 55 60

Ala Thr Ser Glu Pro Gln Ala Gln Ala Arg Glu Gly Ser Leu Gln Leu 65 70 75 80

Gln Phe Pro Leu Pro Gly Met Leu Xaa Pro 85 90

<210> 225

<211> 331

<212> PRT

<213> Homo sapiens

<400> 225

Met Ser Arg Tyr Leu Leu Pro Leu Ser Ala Leu Gly Thr Val Ala Gly
1 5 10 15

Ala Ala Val Leu Leu Lys Asp Tyr Val Thr Gly Gly Ala Cys Pro Ser 20 25 30

Lys Ala Thr Ile Pro Gly Lys Thr Val Ile Val Thr Gly Ala Asn Thr 35 40 45

Gly Ile Gly Lys Gln Thr Ala Leu Glu Leu Ala Arg Arg Gly Gly Asn 50 60

Ile Ile Leu Ala Cys Arg Asp Met Glu Lys Cys Glu Ala Ala Ala Lys 65 70 75 80

Asp Ile Arg Gly Glu Thr Leu Asn His His Val Asn Ala Arg His Leu 85 90 95

Asp Leu Ala Ser Leu Lys Ser Ile Arg Glu Phe Ala Ala Lys Ile Ile 100 105 110

Glu Glu Glu Arg Val Asp Ile Leu Ile Asn Asn Ala Gly Val Met 115 120 125

Arg Cys Pro His Trp Thr Thr Glu Asp Gly Phe Glu Met Gln Phe Gly 130 135 140

Val Asn His Leu Gly His Phe Leu Leu Thr Asn Leu Leu Leu Asp Lys 145 150 155 160

Leu Lys Ala Ser Ala Pro Ser Arg Ile Ile Asn Leu Ser Ser Leu Ala 165 170 175

His Val Ala Gly His Ile Asp Phe Asp Asp Leu Asn Trp Gln Thr Arg
180 185 190

Lys Tyr Asn Thr Lys Ala Ala Tyr Cys Gln Ser Lys Leu Ala Ile Val 195 200 205

Leu Phe Thr Lys Glu Leu Ser Arg Arg Leu Gln Gly Ser Gly Val Thr 210 215 220

Val Asn Ala Leu His Pro Gly Val Ala Arg Thr Glu Leu Gly Arg His

225	230	235	240

Thr Gly Ile His Gly Ser Thr Phe Ser Ser Thr Thr Leu Gly Pro Ile 245 250 255

Phe Trp Leu Leu Val Lys Ser Pro Glu Leu Ala Ala Gln Pro Ser Thr 260 265 270

Tyr Leu Ala Val Ala Glu Glu Leu Ala Asp Val Ser Gly Lys Tyr Phe 275 280 285

Asp Gly Leu Lys Gln Lys Ala Pro Ala Pro Glu Ala Glu Asp Glu Glu 290 295 300

Val Ala Arg Arg Leu Trp Ala Glu Ser Ala Arg Leu Val Gly Leu Glu 305 310 315 320

Ala Pro Ser Val Arg Glu Gln Pro Leu Pro Arg 325 330

<210> 226

<211> 105

<212> PRT

<213> Homo sapiens

<400> 226

Met Gly Trp Thr Met Arg Leu Val Thr Ala Ala Leu Leu Gly Leu
1 5 10 15

Met Met Val Val Thr Gly Asp Glu Asp Glu Asp Ser Pro Cys Ala His 20 25 30

Glu Ala Leu Leu Asp Glu Asp Thr Leu Phe Cys Gln Phe Arg Ala Pro 35 40 45

Arg Leu Glu Ser Arg Gly Pro Ile Leu Arg Thr Pro Arg Ile His Gln 50 55 60

Gln Ala Pro Ser Leu Arg Lys Arg Leu Met Thr Leu Arg Leu His Ala 65 70 75 80

Arg Lys Met Ser Phe Asp Phe Lys Pro Ser Ser Gln Lys Arg Ser Phe 85 90 95

Val Phe Ile Val Thr Glu Asp Phe Cys 100 105

<210> 227

<211> 89

<212> PRT

<213> Homo sapiens

<400> 227

Met Gly Ala Pro Trp Gly Gln Pro Ser Val Ala His His Thr Leu Leu

1 5 10 15

Phe Phe Phe Phe Phe Glu Met Glu Ser Cys Ser Val Ala Gln Ala 20 25 30

Gly Val His Leu Pro Asp Val Ser Ser Leu Gln Pro Pro Pro Gly
35 40 45

Phe Lys Arg Phe Ser Cys Leu Ser Leu Leu Ser Ser Trp Asp Tyr Arg 50 60

Cys Ala Pro Thr His Pro Ala Asn Phe Cys Ile Cys Arg Arg Gly Gly 65 70 75 80

Val Ser Pro Cys Trp Pro Gly Trp Cys 85

<210> 228

<211> 205

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (113)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 228

Met Ala Pro Leu Ala Leu His Leu Leu Val Leu Val Pro Ile Leu Leu 1 5 10 15

Ser Leu Val Ala Ser Gln Asp Trp Lys Ala Glu Arg Ser Gln Asp Pro

Phe Glu Lys Cys Met Gln Asp Pro Asp Tyr Glu Gln Leu Leu Lys Val 35 40 45

Val Thr Trp Gly Leu Asn Arg Thr Leu Lys Pro Gln Arg Val Ile Val 50 55 60

Val Gly Ala Gly Val Ala Gly Leu Val Ala Ala Lys Val Leu Ser Asp 65 70 75 80

Ala Gly His Lys Val Thr Ile Leu Glu Ala Asp Asn Arg Ile Gly Gly 85 90 95

Arg Ile Phe Thr Tyr Arg Asp Gln Asn Thr Gly Trp Ile Gly Glu Leu 100 105 110

Xaa His Ala His Ala Gln Leu Ser Gln Asp Pro Pro Gln Ala Leu Pro 115 120 125

Gly Pro Gly Ala Gln Pro Asp Gln Val His Pro Val Arg Gln Glu His 130 135 140

Val Asp Gly Gly Ala Arg Ser Glu Ala Ala Gln Leu Cys Gly Glu 145 150 155 160

Gly Ala Arg Glu Ala Gly Leu Arg Leu Ala Ser Pro Gly Lys Gly Pro 165 170 175

Leu Ala Arg Arg His Leu Pro Asp Gly Ser Gln Pro Gly Pro Gln Arg
180 185 190

Pro Gln Gly Thr Gly Leu Gln Lys Gly Asp Glu Glu Val 195 200 205

<210> 229

<211> 697

<212> PRT

<213> Homo sapiens

<400> 229

Met Leu Leu Pro Leu Leu Ser Ser Leu Leu Gly Gly Ser Gln Ala 1 5 10 15

Met Asp Gly Arg Phe Trp Ile Arg Val Gln Glu Ser Val Met Val Pro 20 25 30

Glu Gly Leu Cys Ile Ser Val Pro Cys Ser Phe Ser Tyr Pro Arg Gln
35 40 45

Asp Trp Thr Gly Ser Thr Pro Ala Tyr Gly Tyr Trp Phe Lys Ala Val
50 60

Thr Glu Thr Thr Lys Gly Ala Pro Val Ala Thr Asn His Gln Ser Arg 65 70 75 80

Glu Val Glu Met Ser Thr Arg Gly Arg Phe Gln Leu Thr Gly Asp Pro 85 90 95

Ala Lys Gly Asn Cys Ser Leu Val Ile Arg Asp Ala Gln Met Gln Asp 100 105 110

Glu Ser Gln Tyr Phe Phe Arg Val Glu Arg Gly Ser Tyr Val Arg Tyr 115 120 125

Asn Phe Met Asn Asp Gly Phe Phe Leu Lys Val Thr Ala Leu Thr Gln 130 135 140

Lys Pro Asp Val Tyr Ile Pro Glu Thr Leu Glu Pro Gly Gln Pro Val 145 150 155 160

Thr Val Ile Cys Val Phe Asn Trp Ala Phe Glu Glu Cys Pro Pro 165 170 175

Ser Phe Ser Trp Thr Gly Ala Ala Leu Ser Ser Gln Gly Thr Lys Pro 180 . 185 190

195 200 His Asn Thr Asp Leu Thr Cys His Val Asp Phe Ser Arg Lys Gly Val 215 Ser Ala Gln Arg Thr Val Arg Leu Arg Val Ala Tyr Ala Pro Arg Asp 235 240 Leu Val Ile Ser Ile Ser Arg Asp Asn Thr Pro Ala Leu Glu Pro Gln 250 Pro Gln Gly Asn Val Pro Tyr Leu Glu Ala Gln Lys Gly Gln Phe Leu Arg Leu Leu Cys Ala Ala Asp Ser Gln Pro Pro Ala Thr Leu Ser Trp 280 Val Leu Gln Asn Arg Val Leu Ser Ser Ser His Pro Trp Gly Pro Arg Pro Leu Gly Leu Glu Leu Pro Gly Val Lys Ala Gly Asp Ser Gly Arg 315 Tyr Thr Cys Arg Ala Glu Asn Arg Leu Gly Ser Gln Gln Arg Ala Leu Asp Leu Ser Val Gln Tyr Pro Pro Glu Asn Leu Arg Val Met Val Ser 345 Gln Ala Asn Arg Thr Val Leu Glu Asn Leu Gly Asn Gly Thr Ser Leu 360 Pro Val Leu Glu Gly Gln Ser Leu Cys Leu Val Cys Val Thr His Ser 375 Ser Pro Pro Ala Arg Leu Ser Trp Thr Gln Arg Gly Gln Val Leu Ser Pro Ser Gln Pro Ser Asp Pro Gly Val Leu Glu Leu Pro Arg Val Gln 410 Val Glu His Glu Gly Glu Phe Thr Cys His Ala Arg His Pro Leu Gly 425 Ser Gln His Val Ser Leu Ser Leu Ser Val His Tyr Ser Pro Lys Leu Leu Gly Pro Ser Cys Ser Trp Glu Ala Glu Gly Leu His Cys Ser Cys

Ser Ser Gln Ala Ser Pro Ala Pro Ser Leu Arg Trp Trp Leu Gly Glu

Glu Leu Leu Glu Gly Asn Ser Ser Gln Asp Ser Phe Glu Val Thr Pro

470

485

Thr Thr Ser His Phe Ser Val Leu Ser Phe Thr Pro Arg Pro Gln Asp

490

Ser Ser Ala Gly Pro Trp Ala Asn Ser Ser Leu Ser Leu His Gly Gly 500 505 510

Leu Ser Ser Gly Leu Arg Leu Arg Cys Glu Ala Trp Asn Val His Gly 515 520 525

Ala Gln Ser Gly Ser Ile Leu Gln Leu Pro Asp Lys Gly Leu Ile 530 540

Ser Thr Ala Phe Ser Asn Gly Ala Phe Leu Gly Ile Gly Ile Thr Ala 545 550 555 560

Leu Leu Phe Leu Cys Leu Ala Leu Ile Ile Met Lys Ile Leu Pro Lys 565 570 575

Arg Arg Thr Gln Thr Glu Thr Pro Arg Pro Arg Phe Ser Arg His Ser 580 585 590

Thr Ile Leu Asp Tyr Ile Asn Val Val Pro Thr Ala Gly Pro Leu Ala 595 600 605

Gln Lys Arg Asn Gln Lys Ala Thr Pro Asn Ser Pro Arg Thr Pro Leu 610 615 620

Pro Pro Gly Ala Pro Ser Pro Glu Ser Lys Lys Asn Gln Lys Lys Gln 625 630 635 640

Tyr Gln Leu Pro Ser Phe Pro Glu Pro Lys Ser Ser Thr Gln Ala Pro 645 650 655

Glu Ser Gln Glu Ser Gln Glu Glu Leu His Tyr Ala Thr Leu Asn Phe 660 665 670

Pro Gly Val Arg Pro Arg Pro Glu Ala Arg Met Pro Lys Gly Thr Gln 675 680 685

Ala Asp Tyr Ala Glu Val Lys Phe Gln 690

<210> 230

<211> 146

<212> PRT

<213> Homo sapiens

<400> 230

Met Thr Met Arg Ser Leu Leu Arg Thr Pro Phe Leu Cys Gly Leu Leu 1 5 10 15

Trp Ala Phe Cys Ala Pro Gly Ala Arg Ala Glu Glu Pro Ala Ala Ser 20 25 30

Phe Ser Gln Pro Gly Ser Met Gly Leu Asp Lys Asn Thr Val His Asp 35 40 45

Gln Glu His Ile Met Glu His Leu Glu Gly Val Ile Asn Lys Pro Glu

50 55 60

Ala Glu Met Ser Pro Gln Glu Leu Gln Leu His Tyr Phe Lys Met His 65 70 75 80

Asp Tyr Asp Gly Asn Asn Leu Leu Asp Gly Leu Glu Leu Ser Thr Ala 85 90 95

Ile Thr His Val His Lys Glu Glu Gly Ser Glu Gln Ala Pro Leu Met
100 105 110

Ser Glu Asp Glu Leu Ile Asn Ile Ile Asp Gly Val Leu Arg Asp Asp 115 120 125

Asp Lys Asn Asn Asp Gly Tyr Ile Asp Tyr Ala Glu Phe Ala Lys Ser 130 135 140

Leu Gln 145

<210> 231

<211> 110

<212> PRT

<213> Homo sapiens

<400> 231

Met Ala Ser Pro Ala Ser Val Val Pro Ala Val Gly Phe Leu Arg Leu

1 5 10 15

His Ser Met Leu Leu Ile Ala Cys Pro Pro His Ala Ser Leu Gly Leu 20 25 30

Pro Leu His Val Arg Gln Gln Pro Val Glu Leu Arg His Leu Pro Phe 35 40 45

Pro Cys Cys Ser Ser Leu Ser Pro Leu Ser Ser Trp Ala Tyr Arg Val 50 55 60

Leu Pro Phe Cys Pro Cys Trp Ser Thr Val Ala Gln Ser Arg Leu Thr 65 70 75 80

Ala Ala Ser Thr Ser Gln Thr Gln Val Val Leu Pro Pro Gln Pro His
85 90 95

Pro Arg Pro Pro Gln Pro Pro Lys Val Leu Ala Leu Gln Thr
100 105 110

<210> 232

<211> 168

<212> PRT

<213> Homo sapiens

<400> 232

Met Glu Asp Gly Asp Lys Arg Cys Lys Leu Leu Gly Ile Gly Ile
1 5 10 15

Leu Val Leu Leu Ile Ile Val Ile Leu Gly Val Pro Leu Ile Ile Phe 20 25 30

Thr Ile Lys Ala Asn Ser Glu Ala Cys Arg Asp Gly Leu Arg Ala Val 35 40 45

Met Glu Cys Arg Asn Val Thr His Leu Leu Gln Gln Glu Leu Thr Glu
50 60

Ala Gln Lys Gly Phe Gln Asp Val Glu Ala Gln Ala Ala Thr Cys Asn 65 70 75 80

His Thr Val Met Ala Leu Met Ala Ser Leu Asp Ala Glu Lys Ala Gln 85 90 95

Gly Gln Lys Lys Val Glu Glu Leu Glu Gly Glu Ile Thr Thr Leu Asn 100 105 110

His Lys Leu Gln Asp Ala Ser Ala Glu Val Glu Arg Leu Arg Arg Glu
115 120 125

Asn Gln Val Leu Ser Val Arg Ile Ala Asp Lys Lys Tyr Tyr Pro Ser 130 135 140

Leu Gly Leu Ser Ala Leu Leu Gln 165

<210> 233

<211> 186

<212> PRT

<213> Homo sapiens

<400> 233

Met Ala Gly Val Gly Ala Gly Pro Leu Arg Ala Met Gly Arg Gln Ala 1 5 10 15

Leu Leu Leu Leu Cys Ala Thr Gly Ala Gln Gly Leu Tyr Phe
20 25 30

His Ile Gly Glu Thr Glu Lys Arg Cys Phe Ile Glu Glu Ile Pro Asp
35 40 45

Glu Thr Met Val Ile Gly Asn Tyr Arg Thr Gln Met Trp Asp Lys Gln
50 60

Lys Glu Val Phe Leu Pro Ser Thr Pro Gly Leu Gly Met His Val Glu 65 70 75 80

Val Lys Asp Pro Asp Gly Lys Val Val Leu Ser Arg Gln Tyr Gly Ser

90 95

Glu Gly Arg Phe Thr Phe Thr Ser His Thr Pro Gly Asp His Gln Ile 100 105 110

Cys Leu His Ser Asn Ser Thr Arg Met Ala Leu Phe Ala Gly Gly Lys
115 120 125

Leu Arg Val His Leu Asp Ile Gln Val Gly Glu His Ala Asn Asn Tyr 130 135 140

Pro Glu Ile Ala Ala Lys Asp Lys Leu Thr Glu Leu Gln Leu Arg Ala 145 150 155 160

Arg Gln Leu Leu Asp Gln Val Glu Gln Ile Gln Lys Glu Gln Asp Tyr 165 170 175

Gln Arg Ala Ser Ala Tyr Leu Leu Val Ile 180 185

<210> 234

<211> 146

<212> PRT

<213> Homo sapiens

<400> 234

Met Leu Thr Val Ala Leu Leu Ala Leu Leu Cys Ala Ser Ala Ser Gly
1 5 10 15

Asn Ala Ile Gln Ala Arg Ser Ser Ser Tyr Ser Gly Glu Tyr Gly Ser 20 25 30

Gly Gly Gly Lys Arg Phe Ser His Ser Gly Asn Gln Leu Asp Gly Pro 35 40 45

Ile Thr Ala Leu Arg Val Arg Val Asn Thr Tyr Tyr Ile Val Gly Leu 50 55 60

Gln Val Arg Tyr Gly Lys Val Trp Ser Asp Tyr Leu Gly Gly Arg Asn 65 70 75 80

Gly Asp Leu Glu Glu Ile Phe Leu His Pro Gly Glu Ser Val Ile Gln 85 90 95

Val Ser Gly Lys Tyr Lys Trp Tyr Leu Lys Lys Leu Val Phe Val Thr 100 105 110

Asp Lys Gly Arg Tyr Leu Ser Phe Gly Lys Asp Ser Gly Thr Ser Phe 115 120 125

Asn Ala Val Pro Leu His Pro Asn Thr Val Leu Arg Phe Lys Lys 130 135 140

Lys Lys

145

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<210> 235
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<211> 93

<212> PRT

<213> Homo sapiens

<400> 235

Met Ala Arg Leu Gln Thr Ala Leu Leu Val Val Leu Val Leu Ala 1 5 10 15

Val Ala Leu Gln Ala Thr Glu Ala Gly Pro Tyr Gly Ala Asn Met Glu 20 25 30

Asp Ser Val Cys Cys Arg Asp Tyr Val Arg Tyr Arg Leu Pro Leu Arg 35 40 45

Val Val Lys His Phe Tyr Trp Thr Ser Asp Ser Cys Pro Arg Pro Gly 50 55 60

Val Val Leu Leu Thr Phe Arg Asp Lys Glu Ile Cys Ala Asp Pro Arg 65 70 75 80

Val Pro Trp Val Lys Met Ile Leu Asn Lys Leu Ser Gln 85 90

<210> 236

<211> 491

<212> PRT

<213> Homo sapiens

<400> 236

Met Asp Pro Phe Val Val Leu Val Leu Cys Leu Ser Phe Leu Leu 1 5 10 15

Leu Ser Leu Trp Arg Gln Arg Ser Ala Arg Gly Asn Leu Pro Pro Gly 20 25 30

Pro Thr Pro Leu Pro Ile Ile Gly Asn Tyr His Leu Ile Asp Met Lys
35 40 45

Asp Ile Gly Gln Cys Leu Thr Asn Phe Ser Lys Ile Tyr Gly Pro Val 50 60

Phe Thr Leu Tyr Phe Gly Ser Gln Pro Ile Val Ile Leu His Gly Tyr 65 70 75 80

Glu Ala Met Lys Glu Ala Phe Ile Asp Tyr Gly Glu Glu Phe Ser Gly 85 90 95

Arg Gly Arg Ile Pro Val Phe Asp Lys Val Ser Lys Gly Lys Gly Ile 100 105 110

Gly Phe Ser His Gly Asn Val Trp Lys Ala Thr Arg Val Phe Thr Val

- 115 120 125
- Asn Thr Leu Arg Asn Leu Gly Met Gly Lys Arg Thr Ile Glu Thr Lys 130 135 140
- Gly Ser Pro Cys Asp Pro Gln Phe Ile Ile Gly Cys Ala Pro Cys Asn 165 170 175
- Val Ile Cys Ser Ile Val Phe Gln Asn Arg Phe Asp Tyr Lys Asp Lys 180 185 190
- Asp Phe Leu Ser Leu Ile Gly Lys Val Asn Glu Cys Thr Glu Ile Leu 195 200 205
- Ser Ser Pro Glu Cys Gln Ile Phe Asn Ala Val Pro Ile Leu Ile Asp 210 215 220
- Tyr Cys Pro Gly Ser His Asn Lys Phe Leu Lys Asn His Thr Trp Ile 225 230 235 240
- Lys Ser Tyr Leu Leu Glu Lys Ile Lys Glu His Glu Glu Ser Leu Asp 245 250 255
- Val Thr Asn Pro Arg Asp Phe Val Asp Tyr Phe Leu Ile Gln Arg Cys 260 265 270
- Gln Lys Asn Gly Ile Glu His Met Asp Tyr Thr Ile Glu His Leu Ala 275 280 285
- Thr Leu Val Thr Asp Leu Val Phe Gly Gly Thr Glu Pro Leu Ser Ser 290 295 300
- Thr Met Arg Phe Ala Leu Leu Leu Met Lys His Thr His Ile Thr 305 310 315 320
- Ala Lys Val Gln Glu Glu Ile Asp Asn Val Ile Gly Arg His Arg Ser 325 330 335
- Pro Cys Met Gln Asp Arg Asn His Met Pro Tyr Thr Asn Ala Met Val 340 345 350
- His Glu Val Gln Arg Tyr Ile Asp Leu Gly Pro Asn Gly Val Val His  $355 \hspace{1.5cm} 360 \hspace{1.5cm} 365$
- Glu Val Thr Cys Asp Thr Lys Phe Arg Asn Tyr Phe Ile Pro Lys Gly 370 375 380
- Thr Gln Val Met Thr Ser Leu Thr Ser Val Leu His Asp Ser Thr Glu 385 390 395 400
- Phe Pro Asn Pro Glu Val Phe Asp Pro Gly His Phe Leu Asp Asp Asn 405 410 415
- Gly Asn Phe Lys Lys Ser Asp Tyr Phe Val Pro Phe Ser Ala Gly Lys

420 425 430

Arg Ile Cys Val Gly Glu Ser Leu Ala Arg Met Glu Leu Phe Leu Phe 435 440 445

Leu Thr Thr Ile Leu Gln Asn Phe Lys Leu Lys Pro Leu Val Asp Pro 450 455 460

Lys Asp Ile Asp Met Thr Pro Lys His Ser Gly Phe Ser Lys Ile Pro 465 470 475 480

Pro Asn Phe Gln Met Cys Phe Ile Pro Val Glu 485 490

<210> 237

<211> 114

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (29)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (30)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (90)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 237

Met Pro Val Gly Leu Glu Ala Met Leu Gly Ile Glu Ser Gly Trp Leu
1 5 10 15

Ser Leu Leu Pro Glu Leu Leu Phe Val Leu Ser Leu Xaa Xaa Cys Arg 20 25 30

Asp Ser Ala Ser Ser Ala Gly Cys His Leu Leu Phe Phe Ser Ser 35 40 45

Glu Met Gly Ser Arg Tyr Val Val Gln Gly Gly Leu Lys Leu Thr 50 55 60

Ser His Leu Gly Leu Pro Gly Cys Trp Asp Cys Arg His Glu Pro Pro 65 70 75 80

Tyr Leu Ala Ser Val Ser Leu Leu Ile Xaa Glu Leu Trp Leu Gly Ala 85 90 95

Ala Ala Arg Val Cys Cys Pro Ser Ala Leu Gly Gly Gln Gly Gly Arg 100 105 110 Ile Thr

<210> 238

<211> 88

<212> PRT

<213> Homo sapiens

<400> 238

Met Val Phe Phe Leu Leu Leu Phe Leu Arg Glu Gly Leu Ala Leu 1 5 10 15

Ser Pro Arg Leu Glu Cys Ser Ser Thr Ile Ile Ala His Tyr Ser Leu 20 25 30

Lys Phe Leu Asp Ser Ser Ala Pro Pro Ile Ser Ala Ser Pro Val Ala 35 40 45

Gly Thr Thr Ala Cys Thr Thr Ile Pro Gly Tyr Leu Phe Tyr Phe Phe 50 55 60

Val Glu Met Arg Ser Pro Cys Val Ala Gln Ala Gly Leu Lys His Leu 65 70 75 80

Asp Ser Arg Asp Pro Pro Ala Ser 85

<210> 239

<211> 498

<212> PRT

<213> Homo sapiens

<400> 239

Met Met Gly Ser Pro Val Ser His Leu Leu Ala Gly Phe Cys Val Trp

1 5 10 15

Val Val Leu Gly Trp Val Gly Gly Ser Val Pro Asn Leu Gly Pro Ala 20 25 30

Glu Gln Gln Asn His Tyr Leu Ala Gln Leu Phe Gly Leu Tyr Gly
35 40 45

Glu Asn Gly Thr Leu Thr Ala Gly Gly Leu Ala Arg Leu Leu His Ser 50 60

Leu Gly Leu Gly Arg Val Gln Gly Leu Arg Leu Gly Gln His Gly Pro
65 70 75 80

Leu Thr Gly Arg Ala Ala Ser Pro Ala Ala Asp Asn Ser Thr His Arg 85 90 95

Pro Gln Asn Pro Glu Leu Ser Val Asp Val Trp Ala Gly Met Pro Leu

Gly	Pro	Ser	Gly	Trp	Gly	Asp	Leu	Glu	Glu	Ser	Lys	Ala	Pro
		115					120					125	

135

100

Pro Arg Gly Pro Ala Pro Ser Gly Leu Asp Leu Leu His Arg Leu Leu

105

110

His Leu

Leu Leu Asp His Ser Leu Ala Asp His Leu Asn Glu Asp Cys Leu Asn

Gly Ser Gln Leu Leu Val Asn Phe Gly Leu Ser Pro Ala Ala Pro Leu 165 170 175

Thr Pro Arg Gln Phe Ala Leu Leu Cys Pro Ala Leu Leu Tyr Gln Ile 180 185 190

Asp Ser Arg Val Cys Ile Gly Ala Pro Ala Pro Ala Pro Gly Asp 195 200 205

Leu Leu Ser Ala Leu Leu Gln Ser Ala Leu Ala Val Leu Leu Ser 210 215 220

Leu Pro Ser Pro Leu Ser Leu Leu Leu Leu Arg Leu Leu Gly Pro Arg 225 230 235 240

Leu Leu Arg Pro Leu Leu Gly Phe Leu Gly Ala Leu Ala Val Gly Thr 245 250 255

Leu Cys Gly Asp Ala Leu Leu His Leu Leu Pro His Ala Gln Glu Gly
260 265 270

Arg His Ala Gly Pro Gly Gly Leu Pro Glu Lys Asp Leu Gly Pro Gly 275 280 285

Leu Ser Val Leu Gly Gly Leu Phe Leu Leu Phe Val Leu Glu Asn Met 290 295 300

Leu Gly Leu Leu Arg His Arg Gly Leu Arg Pro Arg Cys Cys Arg Arg 305 310 315 320

Lys Arg Arg Asn Leu Glu Thr Arg Asn Leu Asp Pro Glu Asn Gly Ser 325 330 335

Gly Met Ala Leu Gln Pro Leu Gln Ala Ala Pro Glu Pro Gly Ala Gln 340 345 350

Gly Gln Arg Glu Lys Asn Ser Gln His Pro Pro Ala Leu Ala Pro Pro 355 360 365

Gly His Gln Gly His Ser His Gly His Gln Gly Gly Thr Asp Ile Thr 370 375 380

Trp Met Val Leu Leu Gly Asp Gly Leu His Asn Leu Thr Asp Gly Leu 385 390 395 400

Ala Ile Gly Ala Ala Phe Ser Asp Gly Phe Ser Ser Gly Leu Ser Thr

405	410	415

Thr Leu Ala Val Phe Cys His Glu Leu Pro His Glu Leu Gly Asp Phe
420 425 430

Ala Met Leu Leu Gln Ser Gly Leu Ser Phe Arg Arg Leu Leu Leu 435 440 445

Ser Leu Val Ser Gly Ala Leu Gly Leu Gly Gly Ala Val Leu Gly Val 450 455 460

Gly Leu Ser Leu Gly Pro Val Pro Leu Thr Pro Trp Val Phe Gly Val 465 470 475 480

Thr Ala Gly Val Phe Leu Tyr Val Ala Leu Val Asp Met Val Asp 485 490 495

Val Gly

<210> 240

<211> 205

<212> PRT

<213> Homo sapiens

<400> 240

Met Cys Asp Gly Ser His Leu Ala Ser Thr Leu Arg Tyr Cys Met Thr 1 5 10 15

Val Ser Gly Thr Val Val Leu Val Ala Gly Thr Leu Cys Phe Ala Trp 20 25 30

Trp Ser Glu Gly Asp Ala Thr Ala Gln Pro Gly Gln Leu Ala Pro Pro
35 40 45

Thr Glu Tyr Pro Val Pro Glu Gly Pro Ser Pro Leu Leu Arg Ser Val 50 55 60

Ser Phe Val Cys Cys Gly Ala Gly Gly Leu Leu Leu Leu Ile Gly Leu 65 70 75 80

Leu Trp Ser Val Lys Ala Ser Ile Pro Gly Pro Pro Arg Trp Asp Pro 85 90 95

Tyr His Leu Ser Arg Asp Leu Tyr Tyr Leu Thr Val Glu Ser Ser Glu 100 105 110

Lys Glu Ser Cys Arg Thr Pro Lys Val Val Asp Ile Pro Thr Tyr Glu 115 120 125

Glu Ala Val Ser Phe Pro Val Ala Glu Gly Pro Pro Thr Pro Pro Ala 130 135 140

Tyr Pro Thr Glu Glu Ala Leu Glu Pro Ser Gly Ser Arg Asp Ala Leu 145 150 155 160 Leu Ser Thr Gln Pro Ala Trp Pro Pro Pro Ser Tyr Glu Ser Ile Ser 165 170 175

Leu Ala Leu Asp Ala Val Ser Ala Glu Thr Thr Pro Ser Ala Thr Arg 180 185 190

Ser Cys Ser Gly Leu Val Gln Thr Ala Arg Gly Gly Ser 195 200 205

<210> 241

<211> 197

<212> PRT

<213> Homo sapiens

<400> 241

Leu Thr Gly Arg Gly His Ala Arg Ala Ser Val Arg Phe Pro Ser Leu

1 5 10 15

Ser Leu Pro Ile Leu Thr Thr Glu Ala Thr Thr Lys His Ser Ser Ser 20 25 30

Ser Asp Ser Thr Leu Ser Ala Ser Gln Pro Leu Pro Asp Leu Ser Phe 35 40 45

Pro Leu Leu Pro Ser Leu Leu Gln Gly Cys Pro Arg Gln Gly Phe Gln 50 55 60

Pro Gly Leu Gly Val Ile Phe Ser Pro Gly Ala Asn Pro Ser Leu Ser 65 70 75 80

Cys Tyr Lys Lys Ile Pro Trp Lys Tyr Trp Gly Pro Gly Ser Pro Asp 85 90 95

Ser Arg Asn Cys Pro Cys Ser Glu Gln Pro Glu Phe Ala Gly Pro Gln 100 105 110

Gly Arg Arg Glu Glu Thr Cys Ser Glu Leu Phe Leu Cys Gln Glu Thr 115 120 125

Leu Asp Leu Gly Pro Ser Ile Ser Gln Ala Lys His Pro Leu Val Cys 130 135 140

Val Trp Glu Gly Met Ala Lys Ala Ala Arg Val Leu Thr Pro Gln Asp 145 150 155 160

His Ser Pro Ala Leu Ser Ser Gly Gly Thr Ala Leu Gln Gly Val Leu 165 170 175

Ala Val Gly Pro Ala Gln Leu Gln Ala Glu Gln Gly Gly Pro Glu Ile 180 185 190

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Thr Asp Pro Leu Leu 195 <210> 242

<211> 167

<212> PRT

<213> Homo sapiens

<400> 242

Met Leu Thr Val Ala Leu Leu Ala Leu Cys Ala Ser Ala Ser Gly
1 5 10 15

Asn Ala Ile Gln Ala Arg Ser Ser Tyr Ser Gly Glu Tyr Gly Ser 20 25 30

Gly Gly Lys Arg Phe Ser His Ser Gly Asn Gln Leu Asp Gly Pro 35 40 45

Ile Thr Ala Leu Arg Val Arg Val Asn Thr Tyr Tyr Ile Val Gly Leu
50 55 60

Gln Val Arg Tyr Gly Lys Val Trp Ser Asp Tyr Val Gly Gly Arg Asn 65 70 75 80

Gly Asp Leu Glu Glu Ile Phe Leu His Pro Gly Glu Ser Val Ile Gln 85 90 95

Val Ser Gly Lys Tyr Lys Trp Tyr Leu Lys Lys Leu Val Phe Val Thr 100 105 110

Asp Lys Gly Arg Tyr Leu Ser Phe Gly Lys Asp Ser Gly Thr Ser Phe 115 120 125

Asn Ala Val Pro Leu His Pro Asn Thr Val Leu Arg Phe Ile Ser Gly 130 135 140

Arg Ser Gly Ser Leu Ile Asp Ala Ile Gly Leu His Trp Asp Val Tyr 145 150 155 160

Pro Thr Ser Cys Ser Arg Cys 165

<210> 243

<211> 88

<212> PRT

<213> Homo sapiens

<400> 243

Met Val Met Met Gly Val Arg Met Met Leu Lys Val Met Lys Ile Pro 1 5 10 15

Leu Leu Thr Glu Ala Leu Pro Ala Phe Thr Val Ala Cys Trp Lys
20 25 30

Val Ala Ser Gly Ala Tyr Thr Ile Ala Val Ser Gly Ser Gly Val Thr 35 40 45

Cys Ser Arg Lys Gly Lys Val Arg Arg Lys Glu Phe Ser Ser Leu Gln
50 55 60

Glu Thr Gly Val Gly Thr Ser Tyr Leu Thr Gly Arg His Tyr Ser Trp
65 70 75 80

Met Ser Ile Cys Thr Leu Asp Ser 85

<210> 244

<211> 30

<212> PRT

<213> Homo sapiens

<400> 244

Phe Phe Phe Phe Ser Arg Ser Ala Gln Ser Leu Leu Ala Ile Ser 1 5 10 15

Ala Gln Lys Ser Pro Phe Leu Asn Arg Thr Val Pro Leu Thr 20 25 30

<210> 245

<211> 533

<212> PRT

<213> Homo sapiens

<400> 245

Met Lys Leu Trp Val Ser Ala Leu Leu Met Ala Trp Phe Gly Val Leu 1 5 10 15

Ser Cys Val Gln Ala Glu Phe Phe Thr Ser Ile Gly His Met Thr Asp 20 25 30

Leu Ile Tyr Ala Glu Lys Glu Leu Val Gln Ser Leu Lys Glu Tyr Ile
35 40 45

Leu Val Glu Glu Ala Lys Leu Ser Lys Ile Lys Ser Trp Ala Asn Lys 50 55 60

Met Glu Ala Leu Thr Ser Lys Ser Ala Ala Asp Ala Glu Gly Tyr Leu
65 70 75 80

Ala His Pro Val Asn Ala Tyr Lys Leu Val Lys Arg Leu Asn Thr Asp

Trp Pro Ala Leu Glu Asp Leu Val Leu Gln Asp Ser Ala Ala Gly Phe
100 105 110

Ile Ala Asn Leu Ser Val Gln Arg Gln Phe Phe Pro Thr Asp Glu Asp

Glu Ile Gly Ala Ala Lys Ala Leu Met Arg Leu Gln Asp Thr Tyr Arg

130 135 140

Leu Asp Pro Gly Thr Ile Ser Arg Gly Glu Leu Pro Gly Thr Lys Tyr 145 150 155 Gln Ala Met Leu Ser Val Asp Asp Cys Phe Gly Met Gly Arg Ser Ala Tyr Asn Glu Gly Asp Tyr Tyr His Thr Val Leu Trp Met Glu Gln Val Leu Lys Gln Leu Asp Ala Gly Glu Glu Ala Thr Thr Lys Ser Gln Val Leu Asp Tyr Leu Ser Tyr Ala Val Phe Gln Leu Gly Asp Leu His Arg Ala Leu Glu Leu Thr Arg Arg Leu Leu Ser Leu Asp Pro Ser His 230 235 Glu Arg Ala Gly Gly Asn Leu Arg Tyr Phe Glu Gln Leu Leu Glu Glu Glu Arg Glu Lys Thr Leu Thr Asn Gln Thr Glu Ala Glu Leu Ala Thr 265 Pro Glu Gly Ile Tyr Glu Arg Pro Val Asp Tyr Leu Pro Glu Arg Asp Val Tyr Glu Ser Leu Cys Arg Gly Glu Gly Val Lys Leu Thr Pro Arg Arg Gln Lys Arg Leu Phe Cys Arg Tyr His His Gly Asn Arg Ala Pro 310 320 Gln Leu Leu Ile Ala Pro Phe Lys Glu Glu Asp Glu Trp Asp Ser Pro 330 His Ile Val Arg Tyr Tyr Asp Val Met Ser Asp Glu Glu Ile Glu Arg Ile Lys Glu Ile Ala Lys Pro Lys Leu Ala Arg Ala Thr Val Arg Asp 360 Pro Lys Thr Gly Val Leu Thr Val Ala Ser Tyr Arg Val Ser Lys Ser Ser Trp Leu Glu Asp Asp Asp Pro Val Val Ala Arg Val Asn Arg 395 Arg Met Gln His Ile Thr Gly Leu Thr Val Lys Thr Ala Glu Leu Leu Gln Val Ala Asn Tyr Gly Val Gly Gly Gln Tyr Glu Pro His Phe Asp

Phe Ser Arg Arg Pro Phe Asp Ser Gly Leu Lys Thr Glu Gly Asn Arg

435 440 445

Leu Ala Thr Phe Leu Asn Tyr Met Ser Asp Val Glu Ala Gly Gly Ala 450 455 460

Thr Val Phe Pro Asp Leu Gly Ala Ala Ile Trp Pro Lys Lys Gly Thr 465 470 475 480

Ala Val Phe Trp Tyr Asn Leu Leu Arg Ser Gly Glu Gly Asp Tyr Arg
485 490 495

Thr Arg His Ala Ala Cys Pro Val Leu Val Gly Cys Lys Trp Val Ser 500 510

Asn Lys Trp Phe His Glu Arg Gly Gln Glu Phe Leu Arg Pro Cys Gly 515 520 525

Ser Thr Glu Val Asp 530

<210> 246

<211> 245

<212> PRT

<213> Homo sapiens

<400> 246

Met Asp Val Gly Pro Ser Ser Leu Pro His Leu Gly Leu Lys Leu Leu 1 5 10 15

Leu Leu Leu Leu Pro Leu Arg Gly Gln Ala Asn Thr Gly Cys
20 25 30

Tyr Gly Ile Pro Gly Met Pro Gly Leu Pro Gly Ala Pro Gly Lys Asp  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Gly Tyr Asp Gly Leu Pro Gly Pro Lys Gly Glu Pro Gly Ile Pro Ala 50 60

Ile Pro Gly Ile Arg Gly Pro Lys Gly Gln Lys Gly Glu Pro Gly Leu 65 70 75 80

Pro Gly His Pro Gly Lys Asn Gly Pro Met Gly Pro Pro Gly Met Pro 85 90 95

Gly Val Pro Gly Pro Met Gly Ile Pro Gly Glu Pro Gly Glu Glu Gly
100 105 110

Arg Tyr Lys Gln Lys Phe Gln Ser Val Phe Thr Val Thr Arg Gln Thr 115 120 125

His Gln Pro Pro Ala Pro Asn Ser Leu Ile Arg Phe Asn Ala Val Leu 130 135 140

Thr Asn Pro Gln Gly Asp Tyr Asp Thr Ser Thr Gly Lys Phe Thr Cys 145 ,155 160 Lys Val Pro Gly Leu Tyr Tyr Phe Val Tyr His Ala Ser His Thr Ala 165 170 175

Asn Leu Cys Val Leu Leu Tyr Arg Ser Gly Val Lys Val Val Thr Phe 180 185 190

Cys Gly His Thr Ser Lys Thr Asn Gln Val Asn Ser Gly Gly Val Leu 195 200 205

Leu Arg Leu Gln Val Gly Glu Glu Val Trp Leu Ala Val Asn Asp Tyr 210 215 220

Tyr Asp Met Val Gly Ile Gln Gly Ser Asp Ser Val Phe Ser Gly Phe 225 230 235 240

Leu Leu Phe Pro Asp 245

<210> 247

<211> 307

<212> PRT

<213> Homo sapiens

<400> 247

Met Arg Arg Gly Arg Ala Gly Pro Gly Arg Ala Gly Gly Ala Arg Ser 1 10 15

Ala Ser Trp Met Ser Arg Leu Arg Ala Leu Leu Gly Leu Gly Leu Leu 20 25 30

Val Ala Gly Ser Arg Leu Pro Arg Ile Lys Ser Gln Thr Ile Ala Cys 35 40 45

Arg Ser Gly Pro Thr Trp Gly Pro Gln Arg Leu Asn Ser Gly Gly 50 60

Arg Trp Asp Ser Glu Val Met Ala Ser Thr Val Val Lys Tyr Leu Ser 65 70 75 80

Gln Glu Glu Ala Gln Ala Val Asp Gln Glu Leu Phe Asn Glu Tyr Gln 85 90 95

Phe Ser Val Asp Gln Leu Met Glu Leu Ala Gly Leu Ser Cys Ala Thr 100 105 110

Ala Ile Ala Lys Ala Tyr Pro Pro Thr Ser Met Ser Arg Ser Pro Pro 115 120 125

Thr Val Leu Val Ile Cys Gly Pro Gly Asn Asn Gly Gly Asp Gly Leu 130 135 140

Tyr Pro Lys Arg Pro Asn Lys Pro Leu Phe Thr Ala Leu Val Thr Gln
165 170 175

Cys Gln Lys Met Asp Ile Pro Phe Leu Gly Glu Met Pro Ala Glu Pro 180 185 190

Met Thr Ile Asp Glu Leu Tyr Glu Leu Val Val Asp Ala Ile Phe Gly
195 200 205

Phe Ser Phe Lys Gly Asp Val Arg Glu Pro Phe His Ser Ile Leu Ser 210 215 220

Val Leu Lys Gly Leu Thr Val Pro Ile Ala Ser Ile Asp Ile Pro Ser 225 230 235 240

Gly Trp Asp Val Glu Lys Gly Asn Ala Gly Gly Ile Gln Pro Asp Leu 245 250 255

Leu Ile Ser Leu Thr Ala Pro Lys Lys Ser Ala Thr Gln Phe Thr Gly 260 265 270

Arg Tyr His Tyr Leu Gly Gly Arg Phe Val Pro Pro Ala Leu Glu Lys 275 280 285

Lys Tyr Gln Leu Asn Leu Pro Pro Tyr Pro Asp Thr Glu Cys Val Tyr 290 295 300

Arg Leu Gln 305

<210> 248

<211> 42

<212> PRT

<213> Homo sapiens

<400> 248

Gly Ser Phe Val Gly Gly Ile Val Leu Thr Leu Gly Val Leu Ser Ile 1 5 10 15

Leu Tyr Ile Gly Cys Lys Met Tyr Tyr Ser Arg Arg Gly Ile Arg Tyr 20 25 30

Arg Thr Ile Asp Glu His Asp Ala Ile Ile 35 40

<210> 249

<211> 227

<212> PRT

<213> Homo sapiens

<400> 249

Met Trp Arg Val Pro Gly Thr Thr Arg Arg Pro Val Thr Gly Glu Ser  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Pro Gly Met His Arg Pro Glu Ala Met Leu Leu Leu Leu Thr Leu Ala 20 25 30

Leu Leu Gly Gly Pro Thr Trp Ala Gly Lys Met Tyr Gly Pro Gly Gly
35 40 45

Gly Lys Tyr Phe Ser Thr Thr Glu Asp Tyr Asp His Glu Ile Thr Gly
50 60

Leu Arg Val Ser Val Gly Leu Leu Leu Val Lys Ser Val Gln Val Lys 65 70 75 80

Leu Gly Asp Ser Trp Asp Val Lys Leu Gly Ala Leu Gly Gly Asn Thr 85 90 95

Gln Glu Val Thr Leu Gln Pro Gly Glu Tyr Ile Thr Lys Val Phe Val
100 105 110

Ala Phe Gln Ala Phe Leu Arg Gly Met Val Met Tyr Thr Ser Lys Asp 115 120 125

Arg Tyr Phe Tyr Phe Gly Lys Leu Asp Gly Gln Ile Ser Ser Ala Tyr 130 135 140

Pro Ser Gln Glu Gly Gln Val Leu Val Gly Ile Tyr Gly Gln Tyr Gln 145 155 160

Leu Leu Gly Ile Lys Ser Ile Gly Phe Glu Trp Asn Tyr Pro Leu Glu 165 170 175

Glu Pro Thr Thr Glu Pro Pro Ile Asn Lys Ala Ser Ala Glu Lys Lys 180 185 190

Lys Lys Lys 225

<210> 250

<211> 85

<212> PRT

<213> Homo sapiens

<400> 250

Met Lys Ile Pro Val Leu Pro Ala Val Val Leu Leu Ser Leu Leu Val 1 5 10 15

Leu His Ser Ala Gln Gly Ala Thr Leu Gly Gly Pro Glu Glu Ger 20 25 30 Thr Ile Glu Asn Tyr Ala Ser Arg Pro Glu Ala Phe Lys Ala Asp Glu 35 40 45

Phe Leu Asn Trp His Ala Leu Phe Glu Ser Ile Lys Arg Lys Leu Pro 50 55 60

Phe Leu Asn Trp Asp Ala Phe Pro Lys Leu Lys Gly Leu Arg Ser Ala 65 70 75 80

Thr Pro Asp Ala Gln

<210> 251

<211> 334

<212> PRT

<213> Homo sapiens

<400> 251

Met Asn Leu Leu Leu Leu Leu Ala Val Leu Cys Leu Gly Thr Ala Leu 1 5 10 15

Ala Thr Pro Lys Phe Asp Gln Thr Phe Ser Ala Glu Trp His Gln Trp 20 25 30

Lys Ser Thr His Arg Arg Leu Tyr Gly Thr Asn Glu Glu Glu Trp Arg 35 40 45

Arg Ala Ile Trp Glu Lys Asn Met Arg Met Ile Gln Leu His Asn Gly
50 60

Glu Tyr Ser Asn Gly Gln His Gly Phe Ser Met Glu Met Asn Ala Phe
65 70 75 80

Gly Asp Met Thr Asn Glu Glu Phe Arg Gln Val Val Asn Gly Tyr Arg
85 90 95

His Gln Lys His Lys Lys Gly Arg Leu Phe Gln Glu Pro Leu Met Leu 100 105 110

Lys Ile Pro Lys Ser Val Asp Trp Arg Glu Lys Gly Cys Val Thr Pro 115 120 125

Val Lys Asn Gln Gly Gln Cys Gly Ser Cys Trp Ala Phe Ser Ala Ser 130 135 140

Gly Cys Leu Glu Gly Gln Met Phe Leu Lys Thr Gly Lys Leu Ile Ser 145 150 155 160

Leu Ser Glu Gln Asn Leu Val Asp Cys Ser His Ala Gln Gly Asn Gln
165

Gly Cys Asn Gly Gly Leu Met Asp Phe Ala Phe Gln Tyr Ile Lys Glu 180 185 190

Asn Gly Gly Leu Asp Ser Glu Glu Ser Tyr Pro Tyr Glu Ala Lys Asp

195 200 205

Gly Ser Cys Lys Tyr Arg Ala Glu Phe Ala Val Ala Asn Asp Thr Gly 210 215 220

Phe Val Asp Ile Pro Gln Gln Glu Lys Ala Leu Met Lys Ala Val Ala 225 230 235 240

Thr Val Gly Pro Ile Ser Val Ala Met Asp Ala Ser His Pro Ser Leu 245 250 255

Gln Phe Tyr Ser Ser Gly Ile Tyr Tyr Glu Pro Asn Cys Ser Ser Lys 260 265 270

Asn Leu Asp His Gly Val Leu Leu Val Gly Tyr Gly Tyr Glu Gly Thr 275 280 285

Asp Ser Asn Lys Asn Lys Tyr Trp Leu Val Lys Asn Ser Trp Gly Ser 290 295 300

Glu Trp Gly Met Glu Gly Tyr Ile Lys Ile Ala Lys Asp Arg Asp Asn 305 310 315 320

His Cys Gly Leu Ala Thr Ala Ala Ser Tyr Pro Val Val Asn  $325 \hspace{1cm} 330$ 

<210> 252

<211> 96

<212> PRT

<213> Homo sapiens

<400> 252

Met Ile Val Gly Ser Pro Arg Ala Leu Thr Gln Pro Leu Gly Leu Leu 1 5 10 15

Arg Leu Gln Leu Val Ser Thr Cys Val Ala Phe Ser Leu Val Ala 20 25 30

Ser Val Gly Ala Gly Arg Gly His Gly His Trp Ser Met Phe Thr Trp 35 40 45

Cys Phe Cys Phe Ser Val Thr Leu Ile Ile Leu Ile Val Glu Leu Cys 50 55 60

Gly Leu Gln Ala Arg Phe Pro Leu Ser Trp Arg Asn Phe Pro Ile Thr 65 70 75 80

Phe Ala Cys Tyr Ala Ala Leu Phe Cys Leu Ser Ala Ser Ile Ile Tyr 85 90 95 <210> 253

<211> 82

<212> PRT

<213> Homo sapiens

<400> 253

Met Ser Leu Phe Val Leu Leu Phe Ala His Thr Arg Leu Cys Ser Ser 1 5 10 15

Val Phe Gly Asp Arg Tyr Leu Tyr Val Asp Leu Val Gly Gln Glu Lys 20 25 30

Leu Arg Cys Lys Lys Pro Thr Pro Gln His Ala Gly Phe Asn Gly Lys
35 40 45

Val Asp Gln Lys Asp Asn Lys Leu Gly Lys Leu Ile Asn Cys Val Leu
. 50 60

Leu Lys Ala Ile Cys Asp Phe Ile Leu Lys Ala Leu Gln Met Tyr Leu 65 70 75 80

Ile Phe

<210> 254

<211> 217

<212> PRT

<213> Homo sapiens

<400> 254

Met Arg Met Lys Tyr Leu Trp Thr Ser His Met Cys Val Phe Ala Ser 1 5 10 15

Phe Gly Leu Cys Ser Pro Glu Ile Trp Glu Leu Leu Leu Lys Ser Val 20 25 30

His Leu Tyr Asn Pro Lys Arg Phe Trp Pro Gly Met Met Asp Glu Leu 35 40 45

Ser Glu Leu Arg Glu Phe Tyr Asp Pro Asp Thr Val Glu Leu Met Asn 50 55 60

Trp Ile Asn Ser Asn Thr Pro Arg Lys Ala Val Phe Ala Gly Ser Met
65 70 75 80

Gln Leu Leu Ala Gly Val Lys Leu Cys Thr Gly Arg Thr Leu Thr Asn 85 90 95

His Pro His Tyr Glu Asp Ser Ser Leu Arg Glu Arg Thr Arg Ala Val

Tyr Gln Ile Tyr Ala Lys Arg Ala Pro Glu Glu Val His Ala Leu Leu 115 120 125

Arg Ser Phe Gly Thr Asp Tyr Val Ile Leu Glu Asp Ser Ile Cys Tyr

130 135 140

Glu Arg Arg His Arg Arg Gly Cys Arg Leu Arg Asp Leu Leu Asp Ile 145 150 155 160

Ala Asn Gly His Met Met Asp Gly Pro Gly Glu Asn Asp Pro Asp Leu 165 170 175

Lys Pro Ala Asp His Pro Arg Phe Cys Glu Glu Ile Lys Arg Asn Leu 180 185 190

Pro Pro Tyr Val Ala Tyr Phe Thr Arg Val Phe Gln Asn Lys Thr Phe 195 200 205

His Val Tyr Lys Leu Ser Arg Asn Lys 210 215

<210> 255

<211> 107

<212> PRT

<213> Homo sapiens

<400> 255

Met Gly Arg Gly Trp Val Val Asp Gly Val Ser Val Val Ser Cys Gly
1 5 10 15

Arg Val Ile Leu Leu Phe Leu Phe His Ile Leu Pro Pro Gln
20 25 30

Ala Lys Val Val Ser Phe Gly Phe His Cys Val Asp Cys Ala Gly Ala  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Trp Arg Leu Pro Glu Lys Phe Gly Ala Arg Gln Ala Pro Gly Cys Arg

His Gly Glu Ala Glu Lys Leu Phe Phe Trp Phe Leu His Asn Leu Arg 65 70 75 80

Gly Ala Lys Thr Leu Pro Arg Lys Glu Glu Gly Val Gln Glu Pro Asp 85 90 95

Phe Trp Arg Glu Gly Ser Ser Gln Pro Ala Gly 100 105

<210> 256

<211> 146

<212> PRT

<213> Homo sapiens

<400> 256

Met Ile Ile Ser Thr Ile Gly Glu Ile Ala Leu Asn Pro Leu Asn Ile
1 5 10 15

Leu Gly Ile Asn Phe Leu Gly Arg Arg Leu Ser Leu Ser Ile Thr Met 20 25 30

Gly Cys Thr Ala Leu Phe Cys Leu Leu Leu Asn Ile Cys Thr Ser Ser 35 40 45

Ala Gly Leu Ile Gly Phe Leu Phe Met Leu Arg Ala Leu Val Ala Ala 50 55 60

Asn Phe Asn Thr Val Tyr Ile Tyr Thr Ala Glu Val Tyr Pro Thr Thr 65 70 75 80

Met Arg Ala Leu Gly Met Gly Thr Ser Gly Ser Leu Cys Arg Ile Gly
85 90 95

Ala Met Val Ala Pro Phe Ile Ser Gln Val Leu Met Ser Ala Ser Ile  $100 \hspace{1.5cm} 105 \hspace{1.5cm} 110$ 

Leu Gly Ala Leu Cys Leu Phe Ser Ser Val Cys Val Val Cys Ala Ile 115 120 125

Ser Ala Phe Thr Leu Pro Ile Glu Thr Lys Gly Arg Ala Leu Gln Gln 130 135 140

Ile Lys 145

<210> 257

<211> 205

<212> PRT

<213> Homo sapiens

<400> 257

Met Ala Val Val Phe Ser Thr Leu Val Cys Leu Ser Arg Leu Tyr Thr 1 5 . 10 15

Gly Met His Thr Val Leu Asp Val Leu Gly Gly Val Leu Ile Thr Ala 20 25 30

Leu Leu Ile Val Leu Thr Tyr Pro Ala Trp Thr Phe Ile Asp Cys Leu 35 40 45

Asp Ser Ala Ser Pro Leu Phe Pro Val Cys Val Ile Val Val Pro Phe 50 60

Phe Leu Cys Tyr Asn Tyr Pro Val Ser Asp Tyr Tyr Ser Pro Thr Arg 65 70 75 80

Ala Asp Thr Thr Ile Leu Ala Ala Gly Ala Gly Val Thr Ile Gly
85 90 95

Phe Trp Ile Asn His Phe Phe Gln Leu Val Ser Lys Pro Ala Glu Ser 100 105 110

Leu Pro Val Ile Gln Asn Ile Pro Pro Leu Thr Thr Tyr Met Leu Val

115 120 125

Leu Gly Leu Thr Lys Phe Ala Val Gly Ile Val Leu Ile Leu Leu Val
130 140

Arg Gln Leu Val Gln Asn Leu Ser Leu Gln Val Leu Tyr Ser Trp Phe 145 150 155 160

Lys Val Val Thr Arg Asn Lys Glu Ala Arg Arg Arg Leu Glu Ile Glu
165 170 175

Val Pro Tyr Lys Phe Val Thr Tyr Thr Ser Val Gly Ile Cys Ala Thr 180 185 190

Thr Phe Val Pro Met Leu His Arg Phe Leu Gly Leu Pro 195 200 205

<210> 258

<211> 153

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (20)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (21)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (26)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (114)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 258

Met Leu Pro Arg Gly Arg Pro Arg Ala Leu Gly Ala Ala Ala Leu Leu 1 5 10 15

Leu Leu Xaa Xaa Leu Gly Phe Leu Xaa Phe Gly Gly Asp Leu Gly 20 25 30

Cys Glu Arg Arg Glu Pro Gly Gly Arg Ala Gly Ala Pro Gly Cys Phe 35 40 45

Pro Gly Pro Leu Met Pro Arg Val Pro Pro Asp Gly Arg Leu Arg Arg 50 55 60

Ala Ala Leu Asp Gly Asp Pro Gly Ala Gly Pro Gly Asp His Asn 65 70 75 80

Arg Ser Asp Cys Gly Pro Gln Pro Pro Pro Pro Lys Cys Glu Val 85 90 95

Gly Ala Arg Gly Pro Gly Gly Gly Ser Pro Gly Gly Ala Ala Pro Glu 100 105 110

Pro Xaa Leu Leu Asp Ile Cys Gly Asn His Ser Thr Trp Arg Leu Ser 115 120 125

Ser Thr Gly Gln Pro Ala Gly Ala His Leu Glu Arg Ala Ala Pro Leu 130 135 140

Leu Pro Thr Ser Phe Pro His Leu Lys 145 150

<210> 259

<211> 99

<212> PRT

<213> Homo sapiens

<400> 259

Met Ile Leu Trp Arg Arg Arg His Thr Leu Val Phe Arg Leu Phe Ser
1 5 10 15

Phe Phe Ala Leu Val Ser Pro His Leu Cys Asp Phe Ile Tyr Leu Trp
20 25 30

Ser Leu Met Met Val Thr Tyr Arg Trp Gly Phe Gly Val Asp Ile Leu 35 40 45

Phe Val Asp Val Asp Ala Ile Pro Phe Cys Leu Leu Val Phe Leu Leu 50 60

Thr Val Arg Ser Leu Ser Gly Arg Ser Val Gly Val Ala Gly Gly Pro 65 70 75 80

Leu Pro Thr Leu Phe Ala Trp Val Ser Pro Val Glu Ala Ala Glu Gln
85 90 95

Gln Ile Leu

<210> 260

<211> 171

<212> PRT

<213> Homo sapiens

<400> 260

Met Ala Leu Ala Thr Arg Cys Val Pro Gln Glu Leu Pro Ser Gly Ser 20 25 30

Glu Val Pro Gly Leu Glu Ala Val Gln Val Val Arg Ser Gly Leu Ala 35 40 45

Gly Pro His Arg Cys Ser Cys Arg His Pro Val Leu Ala Leu Thr Gly
50 55 60

Gly Arg Asp Thr Gln Gly Pro Gly Ala Ser Gly Pro Val Leu Gln Trp 65 70 75 80

Pro Pro Leu Leu Ser Gln Arg Val Gln Ala Trp Leu Leu Lys Ala Met 85 90 95

Cys Leu Arg Leu Thr Leu Lys Arg Ala Cys Gln Ala Ala Pro Gly Gly
100 105 110

Ser Ser His Gly Gly Arg Cys Pro Ala Val Cys Trp Pro Pro Gly Gly 115 120 125

Arg Asp Gly Arg Gly Ala Ala Gly Ser Gly Gln Gly His Gly Arg Trp 130 135 140

Pro Gly Leu Gly Thr Ser Leu Gln Val Ala Ser Thr Leu Arg Pro Glu 145 150 155 160

Leu Arg Pro Thr Arg Thr Gly Asp Ala Gly Asp 165 170

<210> 261

<211> 82

<212> PRT

<213> Homo sapiens

<400> 261

Met Gly Phe Ser Pro Cys Ile Phe Trp Gly Arg Gly Leu Phe Ser Ala 1 5 10 15

Thr Ser Trp Gly Leu Leu Pro Phe Ala Val Pro Ile Thr Thr Val Val
20 25 30

Gly Arg Pro Ile Pro Val Pro Gln Arg Leu His Pro Thr Glu Glu Glu 35 40 45

Val Asn His Tyr His Ala Leu Tyr Met Thr Ala Leu Glu Gln Leu Phe
50 60

Glu Glu His Lys Glu Ser Cys Gly Val Pro Ala Ser Thr Cys Leu Thr 65 70 75 80

Phe Ile

<210> 262

<211> 103

<212> PRT

<213> Homo sapiens

<400> 262

Met Thr Leu Trp Asn Gly Val Leu Pro Phe Tyr Pro Gln Pro Arg His 1 5 10 15

Ala Ala Gly Phe Ser Val Pro Leu Leu Ile Val Ile Leu Val Phe Leu 20 25 30

Ala Leu Ala Ala Ser Phe Leu Leu Ile Leu Pro Gly Ile Arg Gly His
35 40 45

Ser Glu Tyr Leu His Ser His Leu Leu Pro Ser Glu Ile Arg Leu Gly
50 55 60

Pro Pro Ser Ser Glu Gly Gly Asp Pro Cys Val Pro Ser Thr Ser Gly 65 70 75 80

Leu Thr Glu Pro His Gln Ala Val Thr Gly Pro Gly Gly Arg Thr Arg
85 90 95

Thr Arg Arg Gln Thr Ala Arg 100

<210> 263

<211> 100

<212> PRT

<213> Homo sapiens

<400> 263

Met Thr Arg Ala Pro Leu Leu Leu Cys Val Ala Leu Val Leu Leu 1 5 10 15

Gly His Val Asn Gly Ala Thr Val Arg Asn Glu Asp Lys Trp Lys Pro 20 25 30

Leu Asn Asn Pro Arg Asn Arg Asp Leu Phe Phe Arg Arg Leu Gln Ala 35 40 45

Tyr Phe Lys Gly Arg Gly Leu Asp Leu Gly Thr Phe Pro Asn Pro Phe 50 60

Pro Thr Asn Glu Asn Pro Arg Pro Leu Ser Phe Gln Ser Glu Leu Thr 65 70 75 80

Ala Ser Ala Ser Ala Asp Tyr Glu Glu Gln Lys Asn Ser Phe His Asn 85 90 95

Tyr Leu Lys Gly 100 <210> 264

<211> 151

<212> PRT

<213> Homo sapiens

<400> 264

Met Arg Arg Leu Leu Val Thr Ser Leu Val Val Val Leu Leu Trp

1 5 10 15

Glu Ala Gly Ala Val Pro Ala Pro Lys Val Pro Ile Lys Met Gln Val 20 25 30

Lys His Trp Pro Ser Glu Gln Asp Pro Glu Lys Ala Trp Gly Ala Arg
35 40 45

Val Val Glu Pro Pro Glu Lys Asp Asp Gln Leu Val Val Leu Phe Pro 50 55 60

Val Gln Lys Pro Lys Leu Leu Thr Thr Glu Glu Lys Pro Arg Gly Gln
65 70 75 80

Gly Arg Gly Pro Ile Leu Pro Gly Thr Lys Ala Trp Met Glu Thr Glu 85 90 95

Asp Thr Leu Gly Arg Val Leu Ser Pro Glu Pro Asp His Asp Ser Leu
100 105 110

Tyr His Pro Pro Pro Glu Glu Asp Gln Gly Glu Arg Pro Arg Leu 115 120 125

Trp Val Met Pro Asn His Gln Val Leu Leu Gly Pro Glu Glu Asp Gln 130 135 140

Asp His Ile Tyr His Pro Gln 145 150

<210> 265

<211> 142

<212> PRT

<213> Homo sapiens

<400> 265

Met Arg Arg Leu Leu Val Thr Ser Leu Val Val Val Leu Leu Trp

1 5 10 15

Glu Ala Gly Ala Val Pro Ala Pro Lys Val Pro Ile Lys Met Gln Val 20 25 30

Lys His Trp Pro Ser Glu Gln Asp Pro Glu Lys Ala Trp Gly Ala Arg
35 40 45

Val Val Glu Pro Pro Glu Lys Asp Asp Gln Leu Val Val Leu Phe Pro

50 55 60

Val Gln Lys Pro Lys Leu Leu Thr Thr Glu Glu Lys Pro Arg Gly Thr
65 70 75 80

Lys Ala Trp Met Glu Thr Glu Asp Thr Leu Gly Arg Val Leu Ser Pro 85 90 95

Glu Pro Asp His Asp Ser Leu Tyr His Pro Pro Pro Glu Glu Asp Gln
100 105 110

Gly Glu Glu Arg Pro Arg Leu Trp Val Met Pro Asn His Gln Val Leu 115 120 125

Leu Gly Pro Glu Glu Asp Gln Asp His Ile Tyr His Pro Gln 130 135 140

<210> 266

<211> 450

<212> PRT

<213> Homo sapiens

<400> 266

Met Leu Val Thr Ala Tyr Leu Ala Phe Val Gly Leu Leu Ala Ser Cys

1 5 10 15

Leu Gly Leu Glu Leu Ser Arg Cys Arg Ala Lys Pro Pro Gly Arg Ala
20 25 30

Cys Ser Asn Pro Ser Phe Leu Arg Phe Gln Leu Asp Phe Tyr Gln Val 35 40 45

Tyr Phe Leu Ala Leu Ala Ala Asp Trp Leu Gln Ala Pro Tyr Leu Tyr 50 55 60

Lys Leu Tyr Gln His Tyr Tyr Phe Leu Glu Gly Gln Ile Ala Ile Leu 65 70 75 80

Tyr Val Cys Gly Leu Ala Ser Thr Val Leu Phe Gly Leu Val Ala Ser 85 90 95

Ser Leu Val Asp Trp Leu Gly Arg Lys Asn Ser Cys Val Leu Phe Ser 100 105 110

Leu Thr Tyr Ser Leu Cys Cys Leu Thr Lys Leu Ser Gln Asp Tyr Phe 115 120 125

Val Leu Leu Val Gly Arg Ala Leu Gly Gly Leu Ser Thr Ala Leu Leu 130 135 140

Phe Ser Ala Phe Glu Ala Trp Tyr Ile His Glu His Val Glu Arg His 145 150 155 160

Asp Phe Pro Ala Glu Trp Ile Pro Ala Thr Phe Ala Arg Ala Ala Phe 165 170 175 Trp Asn His Val Leu Ala Val Val Ala Gly Val Ala Ala Glu Ala Val 180 185 190

Ala Ser Trp Ile Gly Leu Gly Pro Val Ala Pro Phe Val Ala Ala Ile 195 200 205

Pro Leu Leu Ala Leu Ala Gly Ala Leu Ala Leu Arg Asn Trp Gly Glu 210 215 220

Asn Tyr Asp Arg Gln Arg Ala Phe Ser Arg Thr Cys Ala Gly Gly Leu 225 230 235 240

Arg Cys Leu Leu Ser Asp Arg Arg Val Leu Leu Gly Thr Ile Gln 245 250 255

Ala Leu Phe Glu Ser Val Ile Phe Ile Phe Val Phe Leu Trp Thr Pro 260 265 270

Val Leu Asp Pro His Gly Ala Pro Leu Gly Ile Ile Phe Ser Ser Phe 275 280 285

Met Ala Ala Ser Leu Leu Gly Ser Ser Leu Tyr Arg Ile Ala Thr Ser 290 295 300

Lys Arg Tyr His Leu Gln Pro Met His Leu Leu Ser Leu Ala Val Leu 305 310 315 320

Ile Val Val Phe Ser Leu Phe Met Leu Thr Phe Ser Thr Ser Pro Gly 325 330 335

Gln Glu Ser Pro Val Glu Ser Phe Ile Ala Phe Leu Leu Ile Glu Leu 340 345 350

Ala Cys Gly Leu Tyr Phe Pro Ser Met Ser Phe Leu Arg Arg Lys Val

Ile Pro Glu Thr Glu Gln Ala Gly Val Leu Asn Trp Phe Arg Val Pro 370 380

Leu His Ser Leu Ala Cys Leu Gly Leu Leu Val Leu His Asp Ser Asp 385 390 395 400

Arg Lys Thr Gly Thr Arg Asn Met Phe Ser Ile Cys Ser Ala Val Met 405 410 415

Val Met Ala Leu Leu Ala Val Val Gly Leu Phe Thr Val Val Arg His 420 425 430

Asp Ala Glu Leu Arg Val Pro Ser Pro Thr Glu Glu Pro Tyr Ala Pro 435 440 445

Glu Leu 450

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<210> 267
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<211> 266

<212> PRT

<213> Homo sapiens

<400> 267

Met Trp Trp Phe Gln Gln Gly Leu Ser Phe Leu Pro Ser Ala Leu Val 1 5 10 15

Ile Trp Thr Ser Ala Ala Phe Ile Phe Ser Tyr Ile Thr Ala Val Thr
20 25 30

Leu His His Ile Asp Pro Ala Leu Pro Tyr Ile Ser Asp Thr Gly Thr 35 40 45

Val Ala Pro Glu Lys Cys Leu Phe Gly Ala Met Leu Asn Ile Ala Ala 50 55 60

Val Leu Cys Ile Ala Thr Ile Tyr Val Arg Tyr Lys Gln Val His Ala 65 70 75 80

Leu Ser Pro Glu Glu Asn Val Ile Ile Lys Leu Asn Lys Ala Gly Leu 85 90 95

Val Leu Gly Ile Leu Ser Cys Leu Gly Leu Ser Ile Val Ala Asn Phe 100 105 110

Gln Lys Thr Thr Leu Phe Ala Ala His Val Ser Gly Ala Val Leu Thr 115 120 125

Phe Gly Met Gly Ser Leu Tyr Met Phe Val Gln Thr Ile Leu Ser Tyr 130 140

Gln Met Gln Pro Lys Ile His Gly Lys Gln Val Phe Trp Ile Arg Leu 145 150 155 160

Leu Leu Val Ile Trp Cys Gly Val Ser Ala Leu Ser Met Leu Thr Cys 165 170 175

Ser Ser Val Leu His Ser Gly Asn Phe Gly Thr Asp Leu Glu Gln Lys 180 185 190

Leu His Trp Asn Pro Glu Asp Lys Gly Tyr Val Leu His Met Ile Thr 195 200 205

Thr Ala Ala Glu Trp Ser Met Ser Phe Ser Phe Gly Phe Phe Leu 210 215 220

Thr Tyr Ile Arg Asp Phe Gln Lys Ile Ser Leu Arg Val Glu Ala Asn 225 230 235 240

Leu His Gly Leu Thr Leu Tyr Asp Thr Ala Pro Cys Pro Ile Asn Asn 245 250 255

Glu Arg Thr Arg Leu Leu Ser Arg Asp Ile 260 265

<210> 268

<211> 146

<212> PRT

<213> Homo sapiens

<400> 268

Leu Pro Ala Gln Gly Ile Ser Gly Leu Ala Gly Leu Arg Gly Leu Ala
1 5 10 15

Pro Val Glu Leu Trp Val Pro Val Phe Ser Val Phe Phe Ala Ala Leu 20 25 30

Leu Trp Leu Ala Ala Ala Val Leu Gln Ala Cys Val Gly His Ser Asp 35 40 45

Glu Gly Cys Gly Ala Ser Gln Cys Arg Arg Ala Ala Leu Gly Ile Val 50 55 60

Pro Ser Pro Val Ser Val Leu Arg Thr Tyr Pro Gly Leu His His Gln 65 70 75 80

Asp Pro Val Phe Gly Phe Arg Arg Pro Ser Met Gly Lys Thr Arg His
85 90 95

Gln Pro Leu Gln Gln Trp Val Pro Leu Ala Cys Gly His Gln Leu Gly
100 105 110

Asp Pro Gly Ser Gly Pro Leu Leu Ser Pro Val Ser Leu Cys Cys Gly
115 120 125

Phe Trp Ala Val Met Ser Pro Pro Leu Lys Asp Val Phe Thr Leu Thr 130 135 140

Ser Gly 145

<210> 269

<211> 263

<212> PRT

<213> Homo sapiens

<400> 269

Met Lys Ala Gln Gly Val Leu Leu Lys Leu Ala Leu Leu Ala Leu Pro 1 5 10 15

Leu Leu Leu Leu Ser Thr Pro Pro Cys Ala Pro Gln Val Ser Gly 20 25 30

Ile Arg Gly Asp Ala Leu Glu Arg Phe Cys Leu Gln Gln Pro Leu Asp 35 40 45

Cys Asp Asp Ile Tyr Ala Gln Gly Tyr Gln Ser Asp Gly Val Tyr Leu
50 60

Ile Tyr Pro Ser Gly Pro Ser Val Pro Val Pro Val Phe Cys Asp Met 65 70 75 80

Thr Thr Glu Gly Gly Lys Trp Thr Val Phe Gln Lys Arg Phe Asn Gly
85 90 95

Ser Val Ser Phe Phe Arg Gly Trp Asn Asp Tyr Lys Leu Gly Phe Gly 100 105 110

Arg Ala Asp Gly Glu Tyr Trp Leu Gly Leu Gln Asn Met His Leu Leu 115 120 125

Thr Leu Lys Gln Lys Tyr Glu Leu Arg Val Asp Leu Glu Asp Phe Glu 130 135 140

Asn Asn Thr Ala Tyr Ala Lys Tyr Ala Asp Phe Ser Ile Ser Pro Asn 145 150 155 160

Ala Val Ser Ala Glu Glu Asp Gly Tyr Thr Leu Phe Val Ala Gly Phe
165 170 175

Glu Asp Gly Gly Ala Gly Asp Ser Leu Ser Tyr His Ser Gly Gln Lys 180 185 190

Phe Ser Thr Phe Asp Arg Asp Gln Asp Leu Phe Val Gln Asn Cys Ala 195 200 205

Ala Leu Ser Ser Gly Ala Phe Trp Phe Arg Ser Cys His Phe Ala Asn 210 215 220

Leu Asn Gly Phe Tyr Leu Gly Gly Ser His Leu Ser Tyr Ala Asn Gly 225 230 235 240

Ile Asn Trp Ala Gln Trp Lys Gly Phe Tyr Tyr Ser Leu Lys Arg Thr 245 250 255

Glu Met Lys Ile Arg Arg Ala 260

<210> 270

<211> 950

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (153)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (176)

<223> Xaa equals any of the naturally occurring L-amino acids

- <220>
- <221> SITE
- <222> (278)
- <223> Xaa equals any of the naturally occurring L-amino acids
- <400> 270
- Met Thr Trp Arg Met Gly Pro Arg Phe Thr Met Leu Leu Ala Met Trp 1 5 10 15
- Leu Val Cys Gly Ser Glu Pro His Pro His Ala Thr Ile Arg Gly Ser 20 25 30
- His Gly Gly Arg Lys Val Pro Leu Val Ser Pro Asp Ser Ser Arg Pro 35 40 45
- Ala Arg Phe Leu Arg His Thr Gly Arg Ser Arg Gly Ile Glu Arg Ser 50 55 60
- Thr Leu Glu Glu Pro Asn Leu Gln Pro Leu Gln Arg Arg Arg Ser Val 65 70 75 80
- Pro Val Leu Arg Leu Ala Arg Pro Thr Glu Pro Pro Ala Arg Ser Asp 85 90 95
- Ile Asn Gly Ala Ala Val Arg Pro Glu Gln Arg Pro Ala Ala Arg Gly
  100 105 110
- Ser Pro Arg Glu Met Ile Arg Asp Glu Gly Ser Ser Ala Arg Ser Arg 115 120 125
- Met Leu Arg Phe Pro Ser Gly Ser Ser Pro Asn Ile Leu Ala Ser 130 140
- Glu Gly Tyr Tyr Arg Leu Met Met Ser Leu Leu Lys Asp Asp Val Xaa 165 170 175
- Cys Glu Leu Ala Glu Arg His Ile Gln Gln Ile Val Leu Phe His Gln 180 185 190
- Ala Gly Glu Glu Gly Gly Lys Val Arg Arg Ile Thr Ser Glu Gly Gln
  195 200 205
- Ile Leu Glu Gln Pro Leu Asp Pro Ser Leu Ile Pro Lys Leu Met Ser 210 215 220
- Phe Leu Lys Leu Glu Lys Gly Lys Phe Gly Met Val Leu Leu Lys Lys 225 230 240
- Thr Leu Gln Val Glu Glu Arg Tyr Pro Tyr Pro Val Arg Leu Glu Ala 245 250 255
- Met Tyr Glu Val Ile Asp Gln Gly Pro Ile Arg Arg Ile Glu Lys Ile 260 265 270

Arg Gln Lys Gly Phe Xaa Gln Lys Cys Lys Ala Ser Gly Val Glu Gly 275 Gln Val Val Ala Glu Gly Asn Asp Gly Gly Gly Ala Gly Arg Pro Ser Leu Gly Ser Glu Lys Lys Glu Asp Pro Arg Ala Gln Val Pro Pro Thr Arg Glu Ser Arg Val Lys Val Leu Arg Lys Leu Ala Ala Thr Ala Pro Ala Leu Pro Gln Pro Pro Ser Thr Pro Arg Ala Thr Thr 340 345 Leu Pro Pro Ala Pro Ala Thr Thr Val Thr Arg Ser Thr Ser Arg Ala 360 Val Thr Val Ala Ala Arg Pro Met Thr Thr Ala Phe Pro Thr Thr 375 Gln Arg Pro Trp Thr Pro Ser Pro Ser His Arg Pro Pro Thr Thr Thr 390 395 Glu Val Ile Thr Ala Arg Arg Pro Ser Val Ser Glu Asn Leu Tyr Pro Pro Ser Arg Lys Asp Gln His Arg Glu Arg Pro Gln Thr Thr Arg Arg 425 Pro Ser Lys Ala Thr Ser Leu Glu Ser Phe Thr Asn Ala Pro Pro Thr 435 440 Thr Ile Ser Glu Pro Ser Thr Arg Ala Ala Gly Pro Gly Arg Phe Arg 455 460 Asp Asn Arg Met Asp Arg Arg Glu His Gly His Arg Asp Pro Asn Val Val Pro Gly Pro Pro Lys Pro Ala Lys Glu Lys Pro Pro Lys Lys Lys 490 Ala Gln Asp Lys Ile Leu Ser Asn Glu Tyr Glu Glu Lys Tyr Asp Leu Ser Arg Pro Thr Ala Ser Gln Leu Glu Asp Glu Leu Gln Val Gly Asn 520 Val Pro Leu Lys Lys Ala Lys Glu Ser Lys Lys His Glu Lys Leu Glu Lys Pro Glu Lys Glu Lys Lys Lys Met Lys Asn Glu Asn Ala Asp

Lys Leu Leu Lys Ser Glu Lys Gln Met Lys Lys Ser Glu Lys Lys Ser

565

570

- Lys Gln Glu Lys Glu Lys Ser Lys Lys Lys Gly Gly Lys Thr Glu
  580 585 590
- Gln Asp Gly Tyr Gln Lys Pro Thr Asn Lys His Phe Thr Gln Ser Pro 595 600 605
- Lys Lys Ser Val Ala Asp Leu Leu Gly Ser Phe Glu Gly Lys Arg Arg 610 615 620
- Leu Leu Ile Thr Ala Pro Lys Ala Glu Asn Asn Met Tyr Val Gln 625 630 635 640
- Gln Arg Asp Glu Tyr Leu Glu Ser Phe Cys Lys Met Ala Thr Arg Lys 645 650 655
- Ile Ser Val Ile Thr Ile Phe Gly Pro Val Asn Asn Ser Thr Met Lys
  660 665 670
- Ile Asp His Phe Gln Leu Asp Asn Glu Lys Pro Met Arg Val Val Asp 675 680 685
- Asp Glu Asp Leu Val Asp Gln Arg Leu Ile Ser Glu Leu Arg Lys Glu 690 695 700
- Tyr Gly Met Thr Tyr Asn Asp Phe Phe Met Val Leu Thr Asp Val Asp 705 710 715 720
- Leu Arg Val Lys Gln Tyr Tyr Glu Val Pro Ile Thr Met Lys Ser Val 725 730 735
- Phe Asp Leu Ile Asp Thr Phe Gln Ser Arg Ile Lys Asp Met Glu Lys 740 745 750
- Gln Lys Lys Glu Gly Ile Val Cys Lys Glu Asp Lys Lys Gln Ser Leu 755 760 765
- Glu Asn Phe Leu Ser Arg Phe Arg Trp Arg Arg Leu Leu Val Ile 770 785
- Ser Ala Pro Asn Asp Glu Asp Trp Ala Tyr Ser Gln Gln Leu Ser Ala 785 790 795 800
- Leu Ser Gly Gln Ala Cys Asn Phe Gly Leu Arg His Ile Thr Ile Leu 805 810 815
- Lys Leu Cly Val Gly Glu Glu Val Gly Gly Val Leu Glu Leu Phe 820 825 830
- Pro Ile Asn Gly Ser Ser Val Val Glu Arg Glu Asp Val Pro Ala His 835 840 845
- Leu Val Lys Asp Ile Arg Asn Tyr Phe Gln Val Ser Pro Glu Tyr Phe 850 860
- Ser Met Leu Leu Val Gly Lys Asp Gly Asn Val Lys Ser Trp Tyr Pro 865 870 875 880

Ser Pro Met Trp Ser Met Val Ile Val Tyr Asp Leu Ile Asp Ser Met 885 890 895

Gln Leu Arg Arg Gln Glu Met Ala Ile Gln Gln Ser Leu Gly Met Arg 900 905 910

Cys Pro Glu Asp Glu Tyr Ala Gly Tyr Gly Tyr His Ser Tyr His Gln 915 920 925

Gly Tyr Gln Asp Gly Tyr Gln Asp Asp Tyr Arg His His Glu Ser Tyr 930 935 940

His His Gly Tyr Pro Tyr 945 950

<210> 271

<211> 127

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (114)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 271

Met Cys Val His Val Leu His Val Cys Ala Cys Val Cys Met Cys Cys 1 5 10 15

Thr Cys Val Cys Ala His Val Cys Val Asp Met Cys Ser Cys Phe Val 20 25 30

Leu Trp Ser Gly Cys Phe Leu Cys Leu Pro Gln Ile Leu Val Glu Ile 35 40 45

Leu Thr Pro Gln Ala Met Met Leu Gly Gly Gly Ala Ser Gly Arg Trp 50 55 60

Gln Val Arg Glu Ala Ala Ala Leu Leu Gly Asp Gln Cys Pro Ser Thr 65 70 75 80

Ser Gly Ser Arg Glu Val Pro Cys Pro Phe His His Val Arg Thr Arg 85 90 95

Asp Gly Ala Val Tyr Glu Pro Gly Ser Glu Ser Ser Pro Asp Val Glu
100 105 110

Gln Xaa Gly Ala Leu Ile Leu Asn Leu Gln Pro Pro Ala Ala Val 115 120 125

<210> 272

<211> 94

<212> PRT

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<213> Homo sapiens
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<400> 272

Met Ala Ile Ser Ser Val Ala Ser Phe Leu Leu Val Tyr Ser Phe
1 5 10 15

Thr His Ser Leu Met Pro Cys Arg Ala Ile Ile Ser Ser His Ile His
20 25 30

Leu Phe Val His Gln Ser Pro Ala Pro Gly Ser Phe Gly Ala His Gln
35 40 45

Ala Gly Leu Ala Ser Gln Pro Pro Glu Leu Pro Ala Gln Ala Ser Arg
50 55 60

His Leu Ala Ala Ala Ser Ser Pro Leu Ser Thr Pro Tyr Leu Phe Val 65 70 75 80

Gln Pro Arg Pro Trp Gly Leu Trp Gly Arg His Lys Tyr Pro 85 90

<210> 273

<211> 312

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (290)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (292)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (293)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 273

Met Arg Val Lys Arg Leu Leu Lys Ala Gly Val Ile Ser Ala Leu Ala 1 5 10 . 15

Cys Met Val Lys Ala Asp Ser Ala Ile Leu Thr Asp Gln Thr Lys Glu 20 25 30

Leu Leu Ala Arg Val Phe Leu Ala Leu Cys Asp Asn Pro Lys Asp Arg 35 40 45

Gly Thr Ile Val Ala Gln Gly Gly Gly Lys Ala Leu Ile Pro Leu Ala 50 55 60

Leu Glu Gly Thr Asp Val Gly Lys Val Lys Ala Ala His Ala Leu Ala

Lys Ile Ala Ala Val Ser Asn Pro Asp Ile Ala Phe Pro Gly Glu Arg
85 90 95

Val Tyr Glu Val Val Arg Pro Leu Val Arg Leu Leu Asp Thr Gln Arg 100 105 110

Asp Gly Leu Gln Asn Tyr Glu Ala Leu Leu Gly Leu Thr Asn Leu Ser 115 120 125

Gly Arg Ser Asp Lys Leu Arg Gln Lys Ile Phe Lys Glu Arg Ala Leu 130 135 140

Pro Asp Ile Glu Asn Tyr Met Phe Glu Asn His Asp Gln Leu Arg Gln 145 150 155 160

Ala Ala Thr Glu Cys Met Cys Asn Met Val Leu His Lys Glu Val Gln
165 170 175

Glu Arg Phe Leu Ala Asp Gly Asn Asp Arg Leu Lys Leu Val Val Leu 180 185 190

Leu Cys Gly Glu Asp Asp Asp Lys Val Gln Asn Ala Ala Gly Ala 195 200 205

Leu Ala Met Leu Thr Ala Ala His Lys Lys Leu Cys Leu Lys Met Thr 210 215 220

Gln Val Thr Thr Gln Trp Leu Glu Ile Leu Gln Arg Leu Cys Leu His 225 230 235 240

Asp Gln Leu Ser Val Gln His Arg Gly Leu Val Ile Ala Tyr Asn Leu 245 250 255

Leu Ala Ala Asp Ala Glu Leu Ala Lys Lys Leu Val Glu Ser Glu Leu 260 265 270

Leu Glu Ile Leu Thr Val Val Gly Lys Gln Glu Pro Asp Glu Lys Lys 275 280 285

Ala Xaa Val Xaa Xaa Thr Ala Arg Glu Cys Leu Ile Lys Cys Met Asp 290 295 300

Tyr Gly Phe Ile Lys Pro Val Ser 305 310

<210> 274

<211> 237

<212> PRT

<213> Homo sapiens

<400> 274

Met Gly Arg Cys Cys Phe Tyr Thr Ala Gly Thr Leu Ser Leu Leu  $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$ 

Leu Val Thr Ser Val Thr Leu Leu Val Ala Arg Val Phe Gln Lys Ala 20 25 30

Val Asp Gln Ser Ile Glu Lys Lys Ile Val Leu Arg Asn Gly Thr Glu 35 40 45

Ala Phe Asp Ser Trp Glu Lys Pro Pro Leu Pro Val Tyr Thr Gln Phe 50 60

Tyr Phe Phe Asn Val Thr Asn Pro Glu Glu Ile Leu Arg Gly Glu Thr 65 70 75 80

Pro Arg Val Glu Glu Val Gly Pro Tyr Thr Tyr Arg Glu Leu Arg Asn 85 90 95

Lys Ala Asn Ile Gln Phe Gly Asp Asn Gly Thr Thr Ile Ser Ala Val
100 105 110

Ser Asn Lys Ala Tyr Val Phe Glu Arg Asp Gln Ser Val Gly Asp Pro 115 120 125

Lys Ile Asp Leu Ile Arg Thr Leu Asn Ile Pro Val Leu Thr Val Ile 130 135 140

Lys Ala Tyr Gln Gln Lys Leu Phe Val Thr His Thr Val Asp Glu Leu 165 170 175

Leu Trp Gly Tyr Lys Asp Glu Ile Leu Ser Leu Ile His Val Phe Arg 180 185 190

Pro Asp Ile Ser Pro Tyr Phe Gly Leu Phe Tyr Glu Lys Asn Gly Thr 195 200 205

Asn Asp Gly Asp Tyr Val Phe Leu Thr Gly Glu Asp Ser Tyr Leu Asn 210 220

Phe Thr Lys Ile Val Glu Trp Asn Gly Lys Thr Cys Thr 225 230 235

<210> 275

<211> 104

<212> PRT

<213> Homo sapiens

<400> 275

Met Pro Ala His Leu Gly Arg Met Gly Ile Val Arg Leu Gly Leu Leu

1 10 15

Cys Leu Lys Val Ser Val Leu Phe Val Cys Leu Val Ser Cys His Ser 20 25 30

Ser Cys Met Ile Trp Gly Cys Arg Lys Asp Leu His Leu Thr Pro Ala 35 40 45

Leu Met Thr Gln Ile Val Thr Val Phe Gln Gly Arg Thr Ser Phe Leu 50 60

Gln Gly Met Val Val Gly Gly Ser Arg Ser Gln Thr Pro Val Trp Ala 65 70 75 80

Arg Leu Gln Ser Arg Val Gly Ala Val Arg Gly Trp Pro Gly Gly Arg 85 90 95

Cys Ile Thr Gly Ala Leu Cys Cys 100

<210> 276

<211> 82

<212> PRT

<213> Homo sapiens

<400> 276

Met His Thr Phe Thr Leu Phe Ser Val Asn Pro Val Leu Leu Trp Val 1 5 10 15

Phe Phe Phe Leu Leu Ser Phe Phe Phe Phe Phe Lys Arg His Ser 20 25 30

Leu Ala Leu Leu Pro Arg Leu Glu Cys Ser Gly Val Ile Ser Ala His 35 40 45

Cys Ile Leu Cys Leu Leu Gly Ser Ser Glu Ser Cys Ala Ser Ala Ser 50 55 60

Gln Val Gly Gly Ile Met Gly Met Cys Arg His Thr Trp Leu Ile Phe 65 70 75 80

Val Phe

<210> 277

<211> 181

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (32)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (33)

<223> Xaa equals any of the naturally occurring L-amino acids

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<220>
<221> SITE
<222> (87)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (92)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (97)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (103)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (125)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (131)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (137)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (174)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 277
Met Gln Met Leu Thr Phe Leu Leu Cys Phe Gly Phe Pro Phe Ser Thr
Ala Phe Tyr Phe His Ala Gly Glu Arg Glu Glu Lys Cys Leu Ile Xaa
Xaa Ile Pro Ser Asp Thr Leu Val Thr Gly Thr Phe Lys Ile Gln Gln
Trp Asp Ile Gly Arg His Thr Phe Leu Glu Ser Ala Pro Gly Leu Gly
     50
Met Phe Val Thr Ile Thr Thr Tyr Asn Asp Glu Arg Ile His Leu Asp
65
                     70
                                         75
                                                              80
```

Ile Arg Val Gly Glu His Xaa Leu Asp Ala Ala Xaa Ala Gln Ala Lys 85 90 95

Xaa Lys Val Asn Glu Leu Xaa Phe Lys Leu Glu His Leu Ile Glu Gln 100 105 110

Ile Glu Gln Ile Val Lys Glu Gln Asn Tyr Gln Arg Xaa Arg Glu Glu 115 120 125

Asn Phe Xaa Thr Thr Ser Glu Asp Xaa Asn Ser Asn Val Leu Trp Trp 130 135 140

Ala Phe Ala Gln Ile Leu Ile Phe Ile Ser Val Gly Ile Phe Gln Met 145 150 155 160

Lys Tyr Leu Lys Asp Phe Phe Ile Ala Lys Lys Ile Val Xaa Asn Ile 165 170 175

Ile Asn Lys Asp Lys 180

<210> 278

<211> 90

<212> PRT

<213> Homo sapiens

<400> 278

Met Met Ala Gln Lys Arg Lys Gly Lys Met Val Lys Leu Tyr Val Leu  $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$ 

Gly Ser Val Leu Ala Leu Phe Gly Val Val Leu Gly Leu Met Glu Thr  $20 \\ 25 \\ 30$ 

Val Cys Ser Pro Phe Thr Ala Ala Arg Arg Leu Arg Asp Gln Glu Ala 35 40 45

Ala Val Ala Glu Leu Gln Ala Ala Leu Glu Arg Gln Ala Leu Gln Lys
50 55 60

Gln Ala Leu Gln Glu Lys Gly Lys Gln Gln Asp Thr Val Leu Gly Gly 65 70 75 80

Arg Ala Leu Ser Asn Arg Gln His Ala Ser 85 90

<210> 279

<211> 217

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (51)

- <223> Xaa equals any of the naturally occurring L-amino acids
- <220>
- <221> SITE
- <222> (106)
- <223> Xaa equals any of the naturally occurring L-amino acids
- <220>
- <221> SITE
- <222> (129)
- <223> Xaa equals any of the naturally occurring L-amino acids
- <220>
- <221> SITE
- <222> (165)
- <223> Xaa equals any of the naturally occurring L-amino acids
- <220>
- <221> SITE
- <222> (199)
- <223> Xaa equals any of the naturally occurring L-amino acids
- <400> 279
- Met Ala Gly Leu Asn Val Ser Leu Ser Phe Phe Phe Ala Thr Phe Thr 1 5 10 15
- Leu Cys Glu Ala Ala Arg Arg Ala Ser Lys Ala Leu Leu Pro Val Gly
  20 25 30
- Ala Tyr Glu Val Phe Ala Arg Glu Ala Val Gly Ala Val Gln Leu Gly
  35 40 45
- Ala Cys Xaa Leu Glu Met Arg Thr Leu Val Glu Leu Gly Pro Trp Ala
  50 60
- Gly Asp Phe Gly Pro Asp Leu Leu Leu Thr Leu Leu Phe Leu Leu Phe
  65 70 75 80
- Leu Ala His Gly Val Thr Leu Asp Gly Ala Ser Ala Asn Pro Thr Val 85 90 95
- Ser Leu Gln Glu Phe Leu Met Ala Glu Xaa Ser Leu Pro Gly Thr Leu 100 105 110
- Leu Lys Leu Ala Ala Gln Gly Leu Gly Met Gln Ala Ala Cys Thr Leu 115 120 125
- Xaa Arg Leu Cys Trp Ala Trp Glu Leu Ser Asp Leu His Leu Leu Gln
  130 135 140,
- Ser Leu Met Ala Gln Ser Cys Ser Ser Ala Leu Arg Thr Ser Val Pro 145 150 155 160
- His Gly Ala Leu Xaa Glu Ala Ala Cys Thr Phe Cys Phe His Leu Thr 165 170 175
- Leu Leu His Leu Arg His Ser Pro Pro Ala Tyr Ser Gly Pro Ala Val

180 185 190

Ala Leu Leu Val Thr Val Xaa Ala Tyr Thr Ala Gly Pro Tyr Val Cys 195 200 205

Phe Phe Asn Pro Ala Leu Ala Ala Leu 210 215

<210> 280

<211> 89

<212> PRT

<213> Homo sapiens

<400> 280

Met Asn Ala Lys Val Val Val Leu Val Leu Val Leu Thr Ala Leu
1 5 10 15

Cys Leu Ser Asp Gly Lys Pro Val Ser Leu Ser Tyr Arg Cys Pro Cys
20 25 30

Arg Phe Phe Glu Ser His Val Ala Arg Ala Asn Val Lys His Leu Lys  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Ile Leu Asn Thr Pro Asn Cys Ala Leu Gln Ile Val Ala Arg Leu Lys 50 55 60

Asn Asn Asn Arg Gln Val Cys Ile Asp Pro Lys Leu Lys Trp Ile Gln 65 70 75 80

Glu Tyr Leu Glu Lys Ala Leu Asn Lys

<210> 281

<211> 233

<212> PRT

<213> Homo sapiens

<400> 281

Met Thr Phe Val Thr Leu Phe Phe Ala Cys Leu Gly Phe Leu Ser Pro 1 5 10 15

Ala Asn Arg Gly Ala Leu Met Thr Cys Ala Val Val Leu Trp Val Leu 20 25 30

Leu Gly Thr Pro Ala Gly Tyr Val Ala Ala Arg Phe Tyr Lys Ser Phe 35 40 45

Gly Gly Glu Lys Trp Lys Thr Asn Val Leu Leu Thr Ser Phe Leu Cys
50 55 60

Pro Gly Ile Val Phe Ala Asp Phe Phe Ile Met Asn Leu Ile Leu Trp 65 70 75 80

Gly Glu Gly Ser Ser Ala Ala Ile Pro Phe Gly Thr Leu Val Ala Ile 85 90 95

Leu Ala Leu Trp Phe Cys Ile Ser Val Pro Leu Thr Phe Ile Gly Ala
100 105 110

Tyr Phe Gly Phe Lys Lys Asn Ala Ile Glu His Pro Val Arg Thr Asn 115 120 125

Gln Ile Pro Arg Gln Ile Pro Glu Gln Ser Phe Tyr Thr Lys Pro Leu 130 135 140

Pro Gly Ile Ile Met Gly Gly Ile Leu Pro Phe Gly Cys Ile Phe Ile 145 150 155 160

Gln Leu Phe Phe Ile Leu Asn Ser Ile Trp Ser His Gln Met Tyr Tyr 165 170 175

Met Phe Gly Phe Leu Phe Leu Val Phe Ile Ile Leu Val Ile Thr Cys 180 185 190

Ser Glu Ala Thr Ile Leu Leu Cys Tyr Phe His Leu Cys Ala Glu Asp 195 200 205

Tyr His Trp Gln Trp Arg Ser Phe Leu Thr Arg Gly Phe Thr Ala Val 210 215 220

Tyr Phe Leu Ser Met Gln Tyr Thr Thr 225 230

<210> 282

<211> 150

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (89)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 282

Met Val Leu Cys Phe Pro Leu Leu Leu Leu Leu Val Leu Trp Gly
1 5 10 15

Pro Val Cys Pro Leu His Ala Trp Pro Lys Arg Leu Thr Lys Ala His 20 25 30

Trp Phe Glu Ile Gln His Ile Gln Pro Ser Pro Leu Gln Cys Asn Arg 35 40 45

Ala Met Ser Gly Ile Asn Asn Tyr Thr Gln His Cys Lys His Gln Asn 50 55 60

Thr Phe Leu His Asp Ser Phe Gln Asn Val Ala Ala Val Cys Asp Leu 65 70 75 .80

Leu Ser Ile Val Cys Lys Asn Arg Xaa His Asn Cys His Gln Ser Ser 85 90 95

Lys Pro Val Asn Met Thr Asp Cys Arg Leu Thr Ser Gly Lys Tyr Pro
100 105 110

Gln Cys Arg Tyr Ser Ala Ala Ala Gln Tyr Lys Phe Phe Ile Val Ala 115 120 125

Cys Asp Pro Pro Gln Lys Ser Asp Pro Pro Tyr Lys Leu Val Pro Val 130 135 140

His Leu Asp Ser Ile Leu 145 150

<210> 283

<211> 205

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (159)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 283

Met Glu Phe Leu Trp Ala Pro Leu Leu Gly Leu Cys Cys Ser Leu Ala 1 5 10 15

Ala Ala Asp Arg His Thr Val Phe Trp Asn Ser Ser Asn Pro Lys Phe
20 25 30

Arg Asn Glu Asp Tyr Thr Ile His Val Gln Leu Asn Asp Tyr Val Asp 35 40 45

Ile Ile Cys Pro His Tyr Glu Asp His Ser Val Ala Asp Ala Ala Met 50 55 60

Glu Gln Tyr Ile Leu Tyr Leu Val Glu His Glu Glu Tyr Gln Leu Cys 65 70 75 80

Gln Pro Gln Ser Lys Asp Gln Val Arg Trp Gln Cys Asn Arg Pro Ser 85 90 95

Ala Lys His Gly Pro Glu Lys Leu Ser Glu Lys Phe Gln Arg Phe Thr 100 105 110

Pro Phe Thr Leu Gly Lys Glu Phe Lys Glu Gly His Ser Tyr Tyr 115 120 125

Ile Ser Lys Pro Ile His Gln His Glu Asp Arg Cys Leu Arg Leu Lys 130 135 140

Val Thr Val Ser Gly Lys Ile Thr His Ser Pro Gln Ala His Xaa Asn

145 150 155 160

Pro Gln Glu Lys Arg Leu Ala Ala Asp Asp Pro Glu Val Arg Val Leu 165 170 175

His Ser Ile Gly His Ser Ala Ala Pro Arg Leu Phe Pro Leu Ala Trp 180 185 190

Thr Val Leu Leu Leu Pro Leu Leu Leu Gln Thr Pro 195 200 205

<210> 284

<211> 86

<212> PRT

<213> Homo sapiens

<400> 284

Met Ile Pro Ala Val Val Leu Leu Leu Leu Leu Val Glu Gln Ala 1 5 10 15

Ala Ala Leu Gly Glu Pro Gln Leu Cys Tyr Ile Leu Asp Ala Ile Leu 20 25 30

Phe Leu Tyr Gly Ile Val Leu Thr Leu Leu Tyr Cys Arg Leu Lys Ile 35 40 45

Gln Val Arg Lys Ala Ala Ile Thr Ser Tyr Glu Lys Ser Asp Gly Val 50 60

Tyr Thr Gly Leu Ser Thr Arg Asn Gln Glu Thr Tyr Glu Thr Leu Lys
65 70 75 80

His Glu Lys Pro Pro Gln

<210> 285

<211> 245

<212> PRT

<213> Homo sapiens

<400> 285

Met Asp Val Gly Pro Ser Ser Leu Pro His Leu Gly Leu Lys Leu Leu 1 5 10 15

Leu Leu Leu Leu Pro Leu Arg Gly Gln Ala Asn Thr Gly Cys
20 25 30

Tyr Gly Ile Pro Gly Met Pro Gly Leu Pro Gly Ala Pro Gly Lys Asp 35 40 45

Gly Tyr Asp Gly Leu Pro Gly Pro Lys Gly Glu Pro Gly Ile Pro Ala 50 55 60 Ile Pro Gly Ile Arg Gly Pro Lys Gly Gln Lys Gly Glu Pro Gly Leu 65 70 75 80

Pro Gly His Pro Gly Lys Asn Gly Pro Met Gly Pro Pro Gly Met Pro 85 90 95

Gly Val Pro Gly Pro Met Gly Ile Pro Gly Glu Pro Gly Glu Glu Gly 100 105 110

Arg Tyr Lys Gln Lys Phe Gln Ser Val Phe Thr Val Thr Arg Gln Thr 115 120 125

His Gln Pro Pro Ala Pro Asn Ser Leu Ile Arg Phe Asn Ala Val Leu 130 135 140

Thr Asn Pro Gln Gly Asp Tyr Asp Thr Ser Thr Gly Lys Phe Thr Cys 145 150 155 160

Lys Val Pro Gly Leu Tyr Tyr Phe Val Tyr His Ala Ser His Thr Ala 165 170 175

Asn Leu Cys Val Leu Leu Tyr Arg Ser Gly Val Lys Val Val Thr Phe 180 185 190

Cys Gly His Thr Ser Lys Thr Asn Gln Val Asn Ser Gly Gly Val Leu 195 200 205

Leu Arg Leu Gln Val Gly Glu Glu Val Trp Leu Ala Val Asn Asp Tyr 210 215 220

Tyr Asp Met Val Gly Ile Gln Gly Ser Asp Ser Val Phe Ser Gly Phe 225 230 235 240

Leu Leu Phe Pro Asp

<210> 286

<211> 112

<212> PRT

<213> Homo sapiens

<400> 286

Met Glu Lys Ile Leu Ile Leu Leu Val Ala Leu Ser Val Ala Tyr 1 5 10 15

Ala Ala Pro Gly Pro Arg Gly Ile Ile Ile Asn Leu Glu Asn Gly Glu 20 25 30

Leu Cys Met Asn Ser Ala Gln Cys Lys Ser Asn Cys Cys Gln His Ser 35 40 45

Ser Ala Leu Gly Leu Ala Arg Cys Thr Ser Met Ala Ser Glu Asn Ser 50 60

Glu Cys Ser Val Lys Thr Leu Tyr Gly Ile Tyr Tyr Lys Cys Pro Cys

65 70 75 80

Glu Arg Gly Leu Thr Cys Glu Gly Asp Lys Thr Ile Val Gly Ser Ile
85 90 95

Thr Asn Thr Asn Phe Gly Ile Cys His Asp Ala Gly Arg Ser Lys Gln 100 105 110

<210> 287

<211> 106

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (99)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 287

Met Ile Phe Thr Phe Thr Phe Pro Phe Ser Leu Leu Phe Cys Leu Thr
1 5 10 15

Cys Thr Val Ala Thr Glu Met His Phe Arg Asn Arg Arg Phe Arg Pro 20 25 30

Ala Pro Ser Ala Ala Leu Val Pro Val Ala Leu Asp Phe Pro Gly Pro
35 40 45

Phe Pro Val Gly Gly Pro Cys Arg Pro His Gln Gly Gly Val Gly Val 50 55 60

Thr Trp Gln Lys Gly Pro Arg Ser Gly Asp Val Val Pro Arg Ile Trp 65 70 75 80

Asn Leu Ser His Pro Ser Cys Ser Trp Thr Glu Phe Phe Pro Phe Ile 85 90 95

Arg Arg Xaa Pro Leu Ala Val Ser Ser Arg 100 105

<210> 288

<211> 63

<212> PRT

<213> Homo sapiens

<400> 288

Met Thr Glu Ala Thr Phe Asp Thr Leu Arg Leu Trp Leu Ile Ile Leu  $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$ 

Leu Cys Ala Leu Arg Leu Ala Met Met Arg Ser His Leu Gln Ala Tyr

20 25 30

Leu Asn Leu Ala Gln Lys Cys Val Asp Gln Met Lys Lys Glu Ala Gly
35 40 45

Arg Ile Ser Thr Val Glu Leu Gln Lys Met Val Ser Phe Ile Pro 50 55 60

<210> 289

<211> 114

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (113)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 289

Met Ala Ile Leu Val Lys Ser Ser His Val Cys Phe Met Val Ile Leu 1 5 10 15

Gly Leu Leu Phe Leu Arg Asn Cys Gln Ile Val Phe Gln Ser Gly Asn 20 25 30

Thr Ile Pro Leu Tyr His His Lys Ser Asn Ser Gly Ser Val Ser Pro  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

His Pro Cys Gln His Leu Lys Leu Ser Leu Phe Cys Ile Phe Ser Ile 50 55 60

Ala Tyr Tyr Leu Phe Ile Tyr Leu Ile Tyr Leu Phe Ile Leu Arg Gln 65 70 75 80

Ser Leu Gly Asp Arg Glu Arg Leu His Leu Lys Lys Lys Lys Lys 85 90 95

Lys Lys Gln Ser Leu Ser Phe Ser Ser Ser His Tyr Phe Cys Thr Gly
100 105 110

Xaa His

<210> 290

<211> 123

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (55)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (101)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 290

Met Ser Phe Glu Thr Leu Leu Ala Gly Val Pro Ala Ala Ala Leu Ser 1 5 10 15

Trp Ala Val Pro Gly Leu Ser Pro Ser Trp Phe Thr Leu Gly Pro Gly
25 30

Ser Pro Trp Val Leu Val His Pro Gly Ser Trp Ser Cys Ser Pro Ser 35 40 45

Leu Leu Gly Ser Trp Cys Xaa Thr Glu Gly Leu Leu Arg Cys Leu 50 55 60

Gln Ala Ala Val Ala Thr Cys Pro Arg Cys Pro Thr Ser Asp Leu Leu 65 70 75 80

Leu Gly Gly Arg Ala Val Ser Ser Trp Gln Arg Thr Leu Leu Cys Cys
85 90 95

Pro Gly Pro Ser Xaa Ala Ser Arg Val Thr Trp Pro Leu Ala Gly Ala
100 105 110

Leu Arg Gly Arg Ala Thr Glu Ala Pro Glu Pro 115 120

<210> 291

<211> 185

<212> PRT

<213> Homo sapiens

<400> 291

Met Met Met Val Arg Arg Gly Leu Leu Ala Trp Ile Ser Arg Val Val 1 5 10 15

Val Leu Val Leu Leu Cys Cys Ala Ile Ser Val Leu Tyr Met Leu 20 25 30

Ala Cys Thr Pro Lys Gly Asp Glu Glu Gln Leu Ala Leu Pro Arg Ala 35 40 45

Asn Ser Pro Thr Gly Lys Glu Gly Tyr Gln Ala Val Leu Gln Glu Trp 50 55 60

Glu Glu Gln His Arg Asn Tyr Val Ser Ser Leu Lys Arg Gln Ile Ala 65 70 75 80

Gln Leu Lys Glu Glu Leu Gln Glu Arg Ser Glu Gln Leu Arg Asn Gly 85 90 95

Gln Tyr Gln Ala Ser Asp Ala Ala Gly Leu Gly Leu Asp Arg Ser Pro

100 105 110

Pro Glu Lys Thr Gln Ala Asp Leu Leu Ala Phe Leu His Ser Gln Val 115 120 125

Asp Lys Ala Glu Val Asn Ala Gly Val Lys Leu Ala Thr Glu Tyr Ala 130 135 140

Ala Val Pro Phe Asp Ser Phe Thr Leu Gln Lys Val Tyr Gln Leu Glu 145 150 155 160

Thr Gly Leu Thr Arg His Pro Glu Glu Lys Pro Val Arg Lys Asp Lys 165 170 175

Arg Asp Glu Leu Val Glu Ala Ile Glu 180 185

<210> 292

<211> 81

<212> PRT

<213> Homo sapiens

<400> 292

Met Gly Leu Val Trp His His Lys Pro Arg Leu Leu Gly Thr Val Pro
1 5 10 15

Leu Leu Cys Arg Ala Val Cys Leu Trp Gly Ser Leu Leu Leu Ser Cys 20 25 30

Phe Trp Asp Gly Pro Thr Leu Pro Ser Arg Glu Ala Pro Arg Gly Ala 35 40 45

Gly Glu Gln Gly Trp Gln Arg Gln Leu Trp Ala Gly Arg Ala Leu Cys
50 60

Arg Thr Cys Ala Ala Pro Gly Val Ala Gly Thr Val Trp Leu Leu Ser 65 70 75 80

Ala

<210> 293

<211> 88

<212> PRT

<213> Homo sapiens

<400> 293

Met His Leu Arg Leu Cys His Phe Ser Ala Gln His Pro Leu Gly Ala 1 5 10 15

Leu Pro Arg Leu Pro Phe Leu Ala Ala Leu Leu Ala Leu Val Thr Leu 20 25 30

Ala Tyr Phe Arg Leu Ile Ser Ser Gln Gly Leu Cys Thr Phe Ser Leu 35 40 45

Cys Leu Glu Cys Pro Phe Pro Asp Val Cys Leu Ala Tyr Ala Thr Cys 50 55 60

Thr Ser Phe Arg His Lys Arg Gly Pro His Asn Pro Glu Gln Pro Phe 65 70 75 80

Pro Thr Pro Pro Tyr His Leu Leu 85

<210> 294

<211> 210

<212> PRT

<213> Homo sapiens

<400> 294

Met Leu Val Gly Gly Ile Ile Gly Gly His Val Ser Asp Arg Phe Gly
1 5 10 15

Arg Arg Phe Ile Leu Arg Trp Cys Leu Leu Gln Leu Ala Ile Thr Asp 20 25 30

Thr Cys Ala Ala Phe Ala Pro Thr Phe Pro Val Tyr Cys Val Leu Arg
35 40 45

Phe Leu Ala Gly Phe Ser Ser Met Ile Ile Ile Ser Asn Asn Ser Leu 50 55 60

Pro Ile Thr Glu Trp Ile Arg Pro Asn Ser Lys Ala Leu Val Val Ile 65 70 75 80

Leu Ser Ser Gly Ala Leu Ser Ile Gly Gln Ile Ile Leu Gly Gly Leu 85 90 95

Ala Tyr Val Phe Arg Asp Trp Gln Thr Leu His Val Val Ala Ser Val
100 105 110

Pro Phe Val Phe Phe Leu Leu Ser Arg Trp Leu Val Glu Ser Ala 115 120 125

Arg Trp Leu Ile Ile Thr Asn Lys Leu Asp Glu Gly Leu Lys Ala Leu 130 135 140

Arg Lys Val Ala Arg Thr Asn Gly Ile Lys Asn Ala Glu Glu Thr Leu 145 150 155 160

Asn Ile Glu Val Val Arg Ser Thr Met Gln Glu Glu Leu Asp Ala Ala 165 170 175

Gln Thr Lys Thr Thr Val Cys Asp Leu Phe Arg Asn Pro Ser Met Arg 180 185 190

Lys Arg Ile Cys Ile Leu Val Phe Leu Arg Lys Lys Asn Leu Lys Glu

195 200 205

Lys Ala 210

<210> 295

<211> 365

<212> PRT

<213> Homo sapiens

<400> 295

Met Arg Gln Thr Leu Pro Leu Leu Leu Leu Thr Val Leu Arg Pro Ser 1 5 10 15

Trp Ala Asp Pro Pro Gln Glu Lys Val Pro Leu Phe Arg Val Thr Gln
20 25 30

Gln Gly Pro Trp Gly Ser Ser Gly Ser Asn Ala Thr Asp Ser Pro Cys 35 40 45

Glu Gly Leu Pro Ala Ala Asp Ala Thr Ala Leu Thr Leu Ala Asn Arg
50 55 60

Asn Leu Glu Arg Leu Pro Gly Cys Leu Pro Arg Thr Leu Arg Ser Leu 65 70 75 80

Asp Ala Ser His Asn Leu Leu Arg Ala Leu Ser Thr Ser Glu Leu Gly 85 90 95

His Leu Glu Gln Leu Gln Val Leu Thr Leu Arg His Asn Arg Ile Ala 100 105 110

Ala Leu Arg Trp Gly Pro Gly Pro Ala Gly Leu His Thr Leu Asp 115 120 125

Leu Ser Tyr Asn Gln Leu Ala Ala Leu Pro Pro Cys Ala Gly Pro Ala 130 135 140

Leu Ser Ser Phe Arg Ala Leu Ala Leu Ala Gly Asn Pro Leu Arg Ala 145 150 155 160

Leu Gln Pro Arg Ala Phe Ala Cys Phe Pro Ala Leu Gln Leu Leu Asn 165 170 175

Leu Ser Cys Thr Ala Leu Gly Arg Gly Ala Gln Gly Gly Ile Ala Glu 180 185 190

Ala Ala Phe Ala Gly Glu Asp Gly Ala Pro Leu Val Thr Leu Glu Val
195 200 205

Leu Asp Leu Ser Gly Thr Phe Leu Glu Arg Val Glu Ser Gly Trp Ile 210 215 220

Arg Asp Leu Pro Lys Leu Thr Ser Leu Tyr Leu Arg Lys Met Pro Arg 225 230 235 240

Leu Thr Thr Leu Glu Gly Asp Ile Phe Lys Met Thr Pro Asn Leu Gln
245 250 255

Gln Leu Asp Cys Gln Asp Ser Pro Ala Leu Ala Ser Val Ala Thr His 260 265 270

Ile Phe Gln Asp Thr Pro His Leu Gln Val Leu Leu Phe Gln Asn Cys 275 280 285

Asn Leu Ser Ser Phe Pro Pro Trp Thr Leu Asp Ser Ser Gln Val Leu 290 295 300

Ser Ile Asn Leu Phe Gly Asn Pro Leu Thr Cys Ser Cys Asp Leu Ser 305 310 315 320

Trp Leu Leu Thr Asp Ala Lys Arg Thr Val Leu Ser Arg Ser Phe Gln 325 330 335

Arg Lys Leu Leu His Gly Gln Ala Leu Arg His Asn Glu Leu Cys Tyr 340 345 350

Ser Arg Asn Gln Phe Gln Trp Ile Ser Ser Ser Asn Ser 355 360 365

<210> 296

<211> 99

<212> PRT

<213> Homo sapiens

<400> 296

Leu Val Leu Ala Pro His Gly Cys Lys Glu Asn Cys Pro Lys Gln Val 1 5 10 15

Phe Pro Ala Glu Ala Pro Ser Trp Ser Ser Ser Lys Thr Gln Arg Ala
20 25 30

Leu Leu Phe Lys Lys Ser Ile Pro Val Asp Phe Gln Phe Gln Phe Leu 35 40 45

Arg Thr Arg Lys Asp Phe Ile Leu Gln Lys Asp Ser Ser Ser Arg Arg 50 55 60

Thr His Pro Pro Lys Asp Phe Ser Arg Arg Gly Lys Trp Lys Thr Arg 65 70 75 80

Val Thr Cys Ser Gly Leu Ile Thr Glu Leu Cys Leu Ser Leu Thr Ser 85 90 95

Phe Glu Leu

<210> 297

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<211> 196
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<212> PRT

<213> Homo sapiens

<400> 297

Met Trp Phe Met Tyr Leu Leu Ser Trp Leu Ser Leu Phe Ile Gln Val 1 5 10 15

Ala Phe Ile Thr Leu Ala Val Ala Ala Gly Leu Tyr Tyr Leu Ala Glu 20 25 30

Leu Ile Glu Glu Tyr Thr Val Ala Thr Ser Arg Ile Ile Lys Tyr Met  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Ile Trp Phe Ser Thr Ala Val Leu Ile Gly Leu Tyr Val Phe Glu Arg
50 55 60

Phe Pro Thr Ser Met Ile Gly Val Gly Leu Phe Thr Asn Leu Val Tyr 65 70 75 80

Phe Gly Leu Leu Gln Thr Phe Pro Phe Ile Met Leu Thr Ser Pro Asn 85 90 95

Phe Ile Leu Ser Cys Gly Leu Val Val Val Asn His Tyr Leu Ala Phe 100 105 110

Gln Phe Phe Ala Glu Glu Tyr Tyr Pro Phe Ser Glu Val Leu Ala Tyr 115 120 125

Phe Thr Phe Cys Leu Trp Ile Ile Pro Phe Ala Phe Phe Val Ser Leu 130 135 140

Ser Ala Gly Glu Asn Val Leu Pro Ser Thr Met Gln Pro Gly Asp Asp 145 150 155 160

Val Val Ser Asn Tyr Phe Thr Lys Gly Lys Arg Gly Lys Arg Leu Gly
165 170 175

Ile Leu Val Val Phe Ser Phe Ile Lys Glu Ala Ile Leu Pro Ser Arg 180 185 190

Gln Lys Ile Tyr 195

<210> 298

<211> 196

<212> PRT

<213> Homo sapiens

<400> 298

Met Trp Phe Met Tyr Leu Leu Ser Trp Leu Ser Leu Phe Ile Gln Val 1 5 10 15

Ala Phe Ile Thr Leu Ala Val Ala Ala Gly Leu Tyr Tyr Leu Ala Glu 20 25 30 Leu Ile Glu Glu Tyr Thr Val Ala Thr Ser Arg Ile Ile Lys Tyr Met  $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$ 

Ile Trp Phe Ser Thr Ala Val Leu Ile Gly Leu Tyr Val Phe Glu Arg
50 55 60

Phe Pro Thr Ser Met Ile Gly Val Gly Leu Phe Thr Asn Leu Val Tyr 65 70 75 80

Phe Gly Leu Leu Gln Thr Phe Pro Phe Ile Met Leu Thr Ser Pro Asn 85 90 95

Phe Ile Leu Ser Cys Gly Leu Val Val Val Asn His Tyr Leu Ala Phe 100 105 110

Gln Phe Phe Ala Glu Glu Tyr Tyr Pro Phe Ser Glu Val Leu Ala Tyr 115 120 125

Phe Thr Phe Cys Leu Trp Ile Ile Pro Phe Ala Phe Phe Val Ser Leu 130 135 140

Ser Ala Gly Glu Asn Val Leu Pro Ser Thr Met Gln Pro Gly Asp Asp 145 150 155 160

Val Val Ser Asn Tyr Phe Thr Lys Gly Lys Arg Gly Lys Arg Leu Gly 165 170 175

Ile Leu Val Val Phe Ser Phe Ile Lys Glu Ala Ile Leu Pro Ser Arg 180 185 190

Gln Lys Ile Tyr 195

<210> 299

<211> 84

<212> PRT

<213> Homo sapiens

<400> 299

Met Ser Cys Phe Cys Asp Ile Ile Ser Phe His Ser Leu Ser Trp Ser 1 5 10 15

Leu Val Leu Leu Leu Leu Lys Pro Pro Thr Leu Ser Thr Ser Gly
20 25 30

Ser Leu Tyr Lys Phe Ser Leu Leu Ala Thr Phe Pro Pro Gln Ile Phe 35 40 45

His Ile Ile Asn Val Ser Val Tyr Met Leu Pro Pro Glu Arg Gly Leu
50 60

His Trp Leu Phe Phe Phe Asn Ser Thr Ser Thr Gln Ile Cys Ser Val 65 70 75 80 His Pro Leu Gln

<210> 300

<211> 84

<212> PRT

<213> Homo sapiens

<400> 300

Met Ser Cys Phe Cys Asp Ile Ile Ser Phe His Ser Leu Ser Trp Ser 1 5 10 15

Leu Val Leu Leu Leu Leu Lys Pro Pro Thr Leu Ser Thr Ser Gly
20 25 30

Ser Leu Tyr Lys Phe Ser Leu Leu Ala Thr Phe Pro Pro Gln Ile Phe 35 40  $^{\circ}45$ 

His Ile Ile Asn Val Ser Val Tyr Met Leu Pro Pro Glu Arg Gly Leu 50 60

His Trp Leu Phe Phe Phe Asn Ser Thr Ser Thr Gln Ile Cys Ser Val 65 70 75 80

His Pro Leu Gln

<210> 301

<211> 84

<212> PRT

<213> Homo sapiens

<400> 301

Met Ser Cys Phe Cys Asp Ile Ile Ser Phe His Ser Leu Ser Trp Ser 1 5 10 15

Leu Val Leu Leu Leu Leu Lys Pro Pro Thr Leu Ser Thr Ser Gly
20 25 30

Ser Leu Tyr Lys Phe Ser Leu Leu Ala Thr Phe Pro Pro Gln Ile Phe 35 40 45

His Ile Ile Asn Val Ser Val Tyr Met Leu Pro Pro Glu Arg Gly Leu 50 60

His Trp Leu Phe Phe Phe Asn Ser Thr Ser Thr Gln Ile Cys Ser Val 65 70 75 80

His Pro Leu Gln

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<210> 302
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<211> 47

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (21)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 302

Leu Phe Gln Phe Cys Glu Ile Leu Phe Phe Phe Trp Ile Leu Ala Phe
1 5 10 15

Phe Pro Pro Pro Xaa Pro Gln Lys Ile Thr Pro Leu Gly Pro Lys Lys
20 25 30

<210> 303

<211> 400

<212> PRT

<213> Homo sapiens

<400> 303

Met Ala Trp Arg Arg Glu Ala Ser Val Gly Ala Arg Gly Val Leu

1 10 15

Ala Leu Ala Leu Leu Ala Leu Cys Val Pro Gly Ala Arg Gly
20 . 25 . 30

Arg Ala Leu Glu Trp Phe Ser Ala Val Val Asn Ile Glu Tyr Val Asp 35 40 45

Pro Gln Thr Asn Leu Thr Val Trp Ser Val Ser Glu Ser Gly Arg Phe 50 55 60

Gly Asp Ser Ser Pro Lys Glu Gly Ala His Gly Leu Val Gly Val Pro 65 70 75 80

Trp Ala Pro Gly Gly Asp Leu Glu Gly Cys Ala Pro Asp Thr Arg Phe
85 90 95

Phe Val Pro Glu Pro Gly Gly Arg Gly Ala Ala Pro Trp Val Ala Leu 100 105 110

Val Ala Arg Gly Cys Thr Phe Lys Asp Lys Val Leu Val Ala Ala 115 120 125

Arg Arg Asn Ala Ser Ala Val Val Leu Tyr Asn Glu Glu Arg Tyr Gly
130 135 140

Asn Ile Thr Leu Pro Met Ser His Ala Gly Thr Gly Asn Ile Val Val 145 150 155 160

Ile Met Ile Ser Tyr Pro Lys Gly Arg Glu Ile Leu Glu Leu Val Gln 165 170 175

Lys Gly Ile Pro Val Thr Met Thr Ile Gly Val Gly Thr Arg His Val 180 185 190

Gln Glu Phe Ile Ser Gly Gln Ser Val Val Phe Val Ala Ile Ala Phe 195 200 205

Ile Thr Met Met Ile Ile Ser Leu Ala Trp Leu Ile Phe Tyr Tyr Ile 210 215 220

Gln Arg Phe Leu Tyr Thr Gly Ser Gln Ile Gly Ser Gln Ser His Arg 225 230 235 240

Lys Glu Thr Lys Lys Val Ile Gly Gln Leu Leu His Thr Val Lys 245 250 255

His Gly Glu Lys Gly Ile Asp Val Asp Ala Glu Asn Cys Ala Val Cys 260 265 270

Ile Glu Asn Phe Lys Val Lys Asp Ile Ile Arg Ile Leu Pro Cys Lys 275 280 285

His Ile Phe His Arg Ile Cys Ile Asp Pro Trp Leu Leu Asp His Arg 290 295 300

Thr Cys Pro Met Cys Lys Leu Asp Val Ile Lys Ala Leu Gly Tyr Trp 305 310 315 320

Gly Glu Pro Gly Asp Val Gln Glu Met Pro Ala Pro Glu Ser Pro Pro 325 330 335

Gly Arg Asp Pro Ala Ala Asn Leu Ser Leu Ala Leu Pro Asp Asp Asp 340 345 350

Gly Ser Asp Glu Ser Ser Pro Pro Ser Ala Ser Pro Ala Glu Ser Glu 355 360 365

Pro Gln Cys Asp Pro Ser Phe Lys Gly Asp Ala Gly Glu Asn Thr Ala 370 380

Leu Leu Glu Ala Gly Arg Ser Asp Ser Arg His Gly Gly Pro Ile Ser 385 390 395 400

<210> 304

<211> 400

<212> PRT

<213> Homo sapiens

<400> 304

- Met Ala Trp Arg Arg Glu Ala Ser Val Gly Ala Arg Gly Val Leu

  1 5 10 15
- Ala Leu Ala Leu Leu Ala Leu Ala Leu Cys Val Pro Gly Ala Arg Gly
  20 25 30
- Arg Ala Leu Glu Trp Phe Ser Ala Val Val Asn Ile Glu Tyr Val Asp 35 40 45
- Pro Gln Thr Asn Leu Thr Val Trp Ser Val Ser Glu Ser Gly Arg Phe 50 55 60
- Gly Asp Ser Ser Pro Lys Glu Gly Ala His Gly Leu Val Gly Val Pro 65 70 75 80
- Trp Ala Pro Gly Gly Asp Leu Glu Gly Cys Ala Pro Asp Thr Arg Phe
  85 90 95
- Phe Val Pro Glu Pro Gly Gly Arg Gly Ala Ala Pro Trp Val Ala Leu 100 105 110
- Val Ala Arg Gly Gly Cys Thr Phe Lys Asp Lys Val Leu Val Ala Ala 115 120 125
- Arg Arg Asn Ala Ser Ala Val Val Leu Tyr Asn Glu Glu Arg Tyr Gly
  130 135 140
- Asn Ile Thr Leu Pro Met Ser His Ala Gly Thr Gly Asn Ile Val 145 150 155 160
- Ile Met Ile Ser Tyr Pro Lys Gly Arg Glu Ile Leu Glu Leu Val Gln
  165 170 175
- Lys Gly Ile Pro Val Thr Met Thr Ile Gly Val Gly Thr Arg His Val 180 185 190
- Gln Glu Phe Ile Ser Gly Gln Ser Val Val Phe Val Ala Ile Ala Phe 195 200 205
- Ile Thr Met Met Ile Ile Ser Leu Ala Trp Leu Ile Phe Tyr Tyr Ile 210 215 220
- Gln Arg Phe Leu Tyr Thr Gly Ser Gln Ile Gly Ser Gln Ser His Arg 225 230 235 240
- Lys Glu Thr Lys Lys Val Ile Gly Gln Leu Leu His Thr Val Lys 245 250 255
- His Gly Glu Lys Gly Ile Asp Val Asp Ala Glu Asn Cys Ala Val Cys 260 265 270
- Ile Glu Asn Phe Lys Val Lys Asp Ile Ile Arg Ile Leu Pro Cys Lys 275 280 285
- His Ile Phe His Arg Ile Cys Ile Asp Pro Trp Leu Leu Asp His Arg 290 295 300

Thr Cys Pro Met Cys Lys Leu Asp Val Ile Lys Ala Leu Gly Tyr Trp 305 310 315 320

Gly Glu Pro Gly Asp Val Gln Glu Met Pro Ala Pro Glu Ser Pro Pro 325 330 335

Gly Arg Asp Pro Ala Ala Asn Leu Ser Leu Ala Leu Pro Asp Asp Asp 340 345 350

Gly Ser Asp Glu Ser Ser Pro Pro Ser Ala Ser Pro Ala Glu Ser Glu 355 360 365

Pro Gln Cys Asp Pro Ser Phe Lys Gly Asp Ala Gly Glu Asn Thr Ala 370 375 380

Leu Leu Glu Ala Gly Arg Ser Asp Ser Arg His Gly Gly Pro Ile Ser 385 390 395 400

<210> 305

<211> 125

<212> PRT

<213> Homo sapiens

<400> 305

Met Thr Ser Phe Leu Lys Pro Ser Pro Pro Met Ala Ser Met Ser Ser  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Pro Leu Trp Val Cys Leu Phe Thr Ser Gly Cys Ser Leu Ser Val Ser 20 25 30

Ser Met Gly Ser Ser Ser Ser Cys Ser His Thr Asn His Leu Ala Ala 35 40 45

Ser Arg Thr Tyr His Gly Leu Cys His Met Leu Phe Pro Leu Phe Arg 50 55 60

Met Val Ser Ser Pro Ser Leu Cys Leu Ala Asn Ser Ser Ser Phe 65 70 75 80

Ser Ser Pro Leu Ile Leu Asn Val Phe Arg Glu Ala Ser Leu Asp Leu 85 90 95

Leu Val Arg Ser His Phe Leu Val Ile Tyr Ser Phe Ile Ala Leu Ser 100 105 110

Leu Gly Ala Thr Ser Pro Ser Leu Val Trp Leu Leu Glu
115 120 125

<210> 306

<211> 125

<212> PRT

<213> Homo sapiens

<400> 306

Met Thr Ser Phe Leu Lys Pro Ser Pro Pro Met Ala Ser Met Ser Ser 1 5 10 15

Pro Leu Trp Val Cys Leu Phe Thr Ser Gly Cys Ser Leu Ser Val Ser 20 25 30

Ser Met Gly Ser Ser Ser Ser Cys Ser His Thr Asn His Leu Ala Ala 35 40 45

Ser Arg Thr Tyr His Gly Leu Cys His Met Leu Phe Pro Leu Phe Arg 50 55 60

Met Val Ser Ser Pro Ser Leu Cys Leu Ala Asn Ser Ser Ser Phe 65 70 75 80

Ser Ser Pro Leu Ile Leu Asn Val Phe Arg Glu Ala Ser Leu Asp Leu 85 90 95

Leu Val Arg Ser His Phe Leu Val Ile Tyr Ser Phe Ile Ala Leu Ser 100 105 110

Leu Gly Ala Thr Ser Pro Ser Leu Val Trp Leu Leu Glu 115 120 125

<210> 307

<211> 65

<212> PRT

<213> Homo sapiens

<400> 307

Pro Leu Phe Arg Met Val Ser Ser Pro Ser Leu Cys Leu Ala Asn Ser 1 5 10 15

Ser Ser Ser Phe Ser Ser Pro Leu Ile Leu Asn Val Phe Arg Glu Ala 20 25 30

Ser Leu Asp Leu Leu Val Arg Ser His Phe Leu Val Ile Tyr Ser Phe 35 40 45

Ile Ala Leu Ser Leu Gly Ala Thr Ser Pro Ser Leu Val Trp Leu Leu 50 55 60

Glu 65

<210> 308

<211> 294

<212> PRT

<213> Homo sapiens

<400> 308

Met Arg Pro Arg Ala Pro Ala Cys Ala Ala Ala Ala Leu Gly Leu Cys
1 5 10 15

Ser Leu Leu Leu Leu Ala Pro Gly His Ala Cys Pro Ala Gly Cys 20 25 30

Ala Cys Thr Asp Pro His Thr Val Asp Cys Arg Asp Arg Gly Leu Pro
35 40 45

Ser Val Pro Asp Pro Phe Pro Leu Asp Val Arg Lys Leu Leu Val Ala 50 60

Gly Asn Arg Ile Gln Arg Ile Pro Glu Asp Phe Phe Ile Phe Tyr Gly
65 70 75 80

Asp Leu Val Tyr Leu Asp Phe Arg Asn Asn Ser Leu Arg Ser Leu Glu 85 90 95

Glu Gly Thr Phe Ser Gly Ser Ala Lys Leu Val Phe Leu Asp Leu Ser 100 105 110

Tyr Asn Asn Leu Thr Gln Leu Gly Ala Gly Ala Phe Arg Ser Ala Gly
115 120 125

Arg Leu Val Lys Leu Ser Leu Ala Asn Asn Asn Leu Val Gly Val His 130 135 140

Glu Asp Ala Phe Glu Thr Leu Glu Ser Leu Gln Val Leu Glu Leu Asn 145 150 155 160

Asp Asn Asn Leu Arg Ser Leu Ser Val Ala Ala Leu Ala Ala Leu Pro\$165\$ \$170\$ \$175\$

Ala Leu Arg Ser Leu Arg Leu Asp Gly Asn Pro Trp Leu Cys Asp Cys
180 185 190

Asp Phe Ala His Leu Phe Ser Trp Ile Gln Glu Asn Ala Ser Lys Leu 195 200 205

Pro Lys Gly Leu Asp Glu Ile Gln Cys Ser Leu Pro Met Glu Ser Arg 210 215 220

Arg Ile Ser Leù Arg Glu Leu Ser Glu Ala Ser Phe Ser Glu Cys Arg 225 230 235 240

Phe Ser Leu Ser Leu Thr Asp Leu Cys Ile Ile Ile Phe Ser Gly Val 245 250 255

Ala Val Ser Ile Ala Ala Ile Ile Ser Ser Phe Phe Leu Ala Thr Val 260 265 270

Val Gln Cys Leu Gln Arg Cys Ala Pro Asn Lys Asp Ala Glu Asp Glu 275 280 285

Asp Glu Asp Glu Asp Asp

<210> 309

<211> 283

<212> PRT

<213> Homo sapiens

<400> 309

Met Val Ser Ala Ala Ala Pro Ser Leu Leu Ile Leu Leu Leu Leu 1 5 10 15

Leu Gly Ser Val Pro Ala Thr Asp Ala Arg Ser Val Pro Leu Lys Ala
20 25 30

Thr Phe Leu Glu Asp Val Ala Gly Ser Gly Glu Ala Glu Gly Ser Ser 35 40 45

Ala Ser Ser Pro Ser Leu Pro Pro Pro Trp Thr Pro Ala Leu Ser Pro 50 55 60

Thr Ser Met Gly Pro Gln Pro Thr Thr Leu Gly Gly Pro Ser Pro Pro 65 70 75 80

Thr Asn Phe Leu Asp Gly Ile Val Asp Phe Phe Arg Gln Tyr Val Met 85 90 95

Leu Ile Ala Val Val Gly Ser Leu Ala Phe Leu Leu Met Phe Ile Val 100 105 110

Cys Ala Ala Val Ile Thr Arg Gln Lys Gln Lys Ala Ser Ala Tyr Tyr 115 120 125

Pro Ser Ser Phe Pro Lys Lys Lys Tyr Val Asp Gln Ser Asp Arg Ala 130 135 140

Gly Gly Pro Arg Ala Phe Ser Glu Val Pro Asp Arg Ala Pro Asp Ser 145 150 155 160

Arg Pro Glu Glu Ala Leu Asp Ser Ser Arg Gln Leu Gln Ala Asp Ile
165 170 175

Leu Ala Ala Thr Gln Asn Leu Lys Ser Pro Thr Arg Ala Ala Leu Gly
180 185 190

Gly Gly Asp Gly Ala Arg Met Val Glu Gly Arg Gly Ala Glu Glu 195 200 205

Glu Lys Gly Ser Gln Glu Gly Asp Gln Glu Val Gln Gly His Gly Val 210 215 220

Pro Val Glu Thr Pro Glu Ala Gln Glu Glu Pro Cys Ser Gly Val Leu 225 230 235 240

Glu Gly Ala Val Val Ala Gly Glu Gly Gln Gly Glu Leu Glu Gly Ser 245 250 255 Leu Leu Ala Gln Glu Ala Gln Gly Pro Val Gly Pro Pro Glu Ser 260 265 270

Pro Cys Ala Cys Ser Ser Val His Pro Ser Val 275 280

<210> 310

<211> 672

<212> PRT

<213> Homo sapiens

<400> 310

Met Gln Lys Ala Ser Val Leu Leu Phe Leu Ala Trp Val Cys Phe Leu 1 5 10 15

Phe Tyr Ala Gly Ile Ala Leu Phe Thr Ser Gly Phe Leu Leu Thr Arg 20 25 30

Leu Glu Leu Thr Asn His Ser Ser Cys Gln Glu Pro Pro Gly Pro Gly 35 40 45

Ser Leu Pro Trp Gly Ser Gln Gly Lys Pro Gly Ala Cys Trp Met Ala 50 55 60

Ser Arg Phe Ser Arg Val Val Leu Val Leu Ile Asp Ala Leu Arg Phe 65 70 75 80

Asp Phe Ala Gln Pro Gln His Ser His Val Pro Arg Glu Pro Pro Val 85 90 95

Ser Leu Pro Phe Leu Gly Lys Leu Ser Ser Leu Gln Arg Ile Leu Glu 100 105 110

Ile Gln Pro His His Ala Arg Leu Tyr Arg Ser Gln Val Asp Pro Pro 115 120 125

Thr Thr Met Gln Arg Leu Lys Ala Leu Thr Thr Gly Ser Leu Pro 130 135 140

Thr Phe Ile Asp Ala Gly Ser Asn Phe Ala Ser His Ala Ile Val Glu 145 150 155 160

Asp Asn Leu Ile Lys Gln Leu Thr Ser Ala Gly Arg Arg Val Val Phe 165 170 175

Met Gly Asp Asp Thr Trp Lys Asp Leu Phe Pro Gly Ala Phe Ser Lys
180 185 190

Ala Phe Phe Pro Ser Phe Asn Val Arg Asp Leu Asp Thr Val Asp 195 200 205

Asn Gly Ile Leu Glu His Leu Tyr Pro Thr Met Asp Ser Gly Glu Trp 210 215 220

Asp Val Leu Ile Ala His Phe Leu Gly Val Asp His Cys Gly His Lys 225 His Gly Pro His His Pro Glu Met Ala Lys Lys Leu Ser Gln Met Asp Gln Val Ile Gln Gly Leu Val Glu Arg Leu Glu Asn Asp Thr Leu Leu Val Val Ala Gly Asp His Gly Met Thr Thr Asn Gly Asp His Gly Gly 280 Asp Ser Glu Leu Glu Val Ser Ala Ala Leu Phe Leu Tyr Ser Pro Thr 295 Ala Val Phe Pro Ser Thr Pro Pro Glu Glu Pro Glu Val Ile Pro Gln 310 315 Val Ser Leu Val Pro Thr Leu Ala Leu Leu Leu Gly Leu Pro Ile Pro 325 330 Phe Gly Asn Ile Gly Glu Val Met Ala Glu Leu Phe Ser Gly Gly Glu Asp Ser Gln Pro His Ser Ser Ala Leu Ala Gln Ala Ser Ala Leu His 360 Leu Asn Ala Gln Gln Val Ser Arg Phe Leu His Thr Tyr Ser Ala Ala 375 380 Thr Gln Asp Leu Gln Ala Lys Glu Leu His Gln Leu Gln Asn Leu Phe 390 395 400 Ser Lys Ala Ser Ala Asp Tyr Gln Trp Leu Leu Gln Ser Pro Lys Gly 410 Ala Glu Ala Thr Leu Pro Thr Val Ile Ala Glu Leu Gln Gln Phe Leu Arg Gly Ala Arg Ala Met Cys Ile Glu Ser Trp Ala Arg Phe Ser Leu Ser Phe Leu Leu His Leu Leu Ala Ala Gly Ile Pro Val Thr Thr Pro Gly Pro Phe Thr Val Pro Trp Gln Ala Val Ser Ala Trp Ala Leu 470 475 Met Ala Thr Gln Thr Phe Tyr Ser Thr Gly His Gln Pro Val Phe Pro Ala Ile His Trp His Ala Ala Phe Val Gly Phe Pro Glu Gly His Gly 500

Ser Cys Thr Trp Leu Pro Ala Leu Leu Val Gly Ala Asn Thr Phe Ala

520

515

525

Ser His Leu Leu Phe Ala Val Gly Cys Pro Leu Leu Leu Leu Trp Pro 530 540

Phe Leu Cys Glu Ser Gln Gly Leu Arg Lys Arg Gln Gln Pro Pro Gly 545 550 555 560

Asn Glu Ala Asp Ala Arg Val Arg Pro Glu Glu Glu Glu Glu Pro Leu
565 570 575

Met Glu Met Arg Leu Arg Asp Ala Pro Gln His Phe Tyr Ala Ala Leu 580 585 590

Leu Gln Leu Gly Leu Lys Tyr Leu Phe Ile Leu Gly Ile Gln Ile Leu 595 600 605

Ala Cys Ala Leu Ala Ala Ser Ile Leu Arg Arg His Leu Met Val Trp 610 615 620

Lys Val Phe Ala Pro Lys Phe Ile Phe Glu Ala Val Gly Phe Ile Val 625 630 635 640

Ser Ser Val Gly Leu Leu Gly Ile Ala Leu Val Met Arg Val Asp
645 650 655

Gly Ala Val Ser Ser Trp Phe Arg Gln Leu Phe Leu Ala Gln Gln Arg
660 665 670

<210> 311

<211> 10

<212> PRT

<213> Homo sapiens

<400> 311

Trp Leu Ser Phe Leu Ala Ile Ser Gly Trp
1 5 10

<210> 312

<211> 160

<212> PRT

<213> Homo sapiens

<400> 312

Met Glu Gly Ala Glu Leu Ala Gly Lys Ile Leu Ser Thr Trp Leu Thr 1 5 10 15

Leu Val Leu Gly Phe Ile Leu Leu Pro Ser Val Phe Gly Val Ser Leu 20 25 30

Gly Ile Ser Glu Ile Tyr Met Lys Ile Leu Val Lys Thr Leu Glu Trp  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Ala Thr Ile Arg Ile Glu Lys Gly Thr Pro Lys Glu Ser Ile Leu Lys 50 55 60

Asn Ser Ala Ser Val Gly Ile Ile Gln Arg Asp Glu Ser Pro Met Glu 65 70 75 80

Lys Gly Leu Ser Gly Leu Arg Gly Arg Asp Phe Glu Leu Ser Asp Val 85 90 95

Phe Tyr Phe Ser Lys Lys Gly Leu Glu Ala Ile Val Glu Asp Glu Val
100 105 110

Thr Gln Arg Phe Ser Ser Glu Glu Leu Val Ser Trp Asn Leu Leu Thr 115 120 125

Arg Thr Asn Val Asn Phe Gln Tyr Ile Ser Leu Arg Leu Thr Met Val 130 135 140

Trp Val Leu Gly Val Ile Val Arg Tyr Cys Val Leu Leu Pro Leu Arg 145 150 155 160

<210> 313

<211> 160

<212> PRT

<213> Homo sapiens

<400> 313

Met Glu Gly Ala Glu Leu Ala Gly Lys Ile Leu Ser Thr Trp Leu Thr 1 5 10 15

Leu Val Leu Gly Phe Ile Leu Leu Pro Ser Val Phe Gly Val Ser Leu 20 25 30

Gly Ile Ser Glu Ile Tyr Met Lys Ile Leu Val Lys Thr Leu Glu Trp 35 40 45

Ala Thr Ile Arg Ile Glu Lys Gly Thr Pro Lys Glu Ser Ile Leu Lys 50 55 60

Asn Ser Ala Ser Val Gly Ile Ile Gln Arg Asp Glu Ser Pro Met Glu 65 70 75 80

Lys Gly Leu Ser Gly Leu Arg Gly Arg Asp Phe Glu Leu Ser Asp Val 85 90 95

Phe Tyr Phe Ser Lys Lys Gly Leu Glu Ala Ile Val Glu Asp Glu Val 100 105 110

Thr Gln Arg Phe Ser Ser Glu Glu Leu Val Ser Trp Asn Leu Leu Thr 115 120 125 Arg Thr Asn Val Asn Phe Gln Tyr Ile Ser Leu Arg Leu Thr Met Val 130 135 140

Trp Val Leu Gly Val Ile Val Arg Tyr Cys Val Leu Leu Pro Leu Arg 145 150 155 160

<210> 314

<211> 215

<212> PRT

<213> Homo sapiens

<400> 314

Met Gly Leu Glu Lys Pro Gln Ser Lys Leu Glu Gly Gly Met His Pro  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Gln Leu Ile Pro Ser Val Ile Ala Val Val Phe Ile Leu Leu Ser 20 25 30

Val Cys Phe Ile Ala Ser Cys Leu Val Thr His His Asn Phe Ser Arg 35 40 45

Cys Lys Arg Gly Thr Gly Val His Lys Leu Glu His His Ala Lys Leu 50 55 60

Lys Cys Ile Lys Glu Lys Ser Glu Leu Lys Ser Ala Glu Gly Ser Thr 65 70 75 80

Trp Asn Cys Cys Pro Ile Asp Trp Arg Ala Phe Gln Ser Asn Cys Tyr 85 90 95

Phe Pro Leu Thr Asp Asn Lys Thr Trp Ala Glu Ser Glu Arg Asn Cys
100 105 110

Ser Gly Met Gly Ala His Leu Met Thr Ile Ser Thr Glu Ala Glu Gln 115 120 125

Asn Phe Ile Ile Gln Phe Leu Asp Arg Leu Ser Tyr Phe Leu Gly 130 135 140

Leu Arg Asp Glu Asn Ala Lys Gly Gln Trp Arg Trp Val Asp Gln Thr 145 150 155 160

Pro Phe Asn Pro Arg Arg Val Phe Trp His Lys Asn Glu Pro Asp Asn 165 170 175

Ser Gln Gly Glu Asn Cys Val Val Leu Val Tyr Asn Gln Asp Lys Trp 180 185 190

Ala Trp Asn Asp Val Pro Cys Asn Phe Glu Ala Ser Arg Ile Cys Lys 195 200 205

Ile Pro Gly Thr Thr Leu Asn

210 215

<210> 315

<211> 215

<212> PRT

<213> Homo sapiens

<400> 315

Met Gly Leu Glu Lys Pro Gln Ser Lys Leu Glu Gly Gly Met His Pro 1 5 10 15

Gln Leu Ile Pro Ser Val Ile Ala Val Val Phe Ile Leu Leu Ser 20 25 30

Val Cys Phe Ile Ala Ser Cys Leu Val Thr His His Asn Phe Ser Arg 35 40 45

Cys Lys Arg Gly Thr Gly Val His Lys Leu Glu His His Ala Lys Leu 50 55 60

Lys Cys Ile Lys Glu Lys Ser Glu Leu Lys Ser Ala Glu Gly Ser Thr 65 70 75 80

Trp Asn Cys Cys Pro Ile Asp Trp Arg Ala Phe Gln Ser Asn Cys Tyr 85 90 95

Phe Pro Leu Thr Asp Asn Lys Thr Trp Ala Glu Ser Glu Arg Asn Cys
100 105 110

Ser Gly Met Gly Ala His Leu Met Thr Ile Ser Thr Glu Ala Glu Gln 115 120 125

Asn Phe Ile Ile Gln Phe Leu Asp Arg Leu Ser Tyr Phe Leu Gly 130 135

Leu Arg Asp Glu Asn Ala Lys Gly Gln Trp Arg Trp Val Asp Gln Thr 145 150 155 160

Pro Phe Asn Pro Arg Arg Val Phe Trp His Lys Asn Glu Pro Asp Asn 165 170 175

Ser Gln Gly Glu Asn Cys Val Val Leu Val Tyr Asn Gln Asp Lys Trp 180 185 190

Ala Trp Asn Asp Val Pro Cys Asn Phe Glu Ala Ser Arg Ile Cys Lys 195 200 205

Ile Pro Gly Thr Thr Leu Asn 210 215

<210> 316

<211> 215

<212> PRT

<213> Homo sapiens

<400> 316

Met Gly Leu Glu Lys Pro Gln Ser Lys Leu Glu Gly Gly Met His Pro 1 5 10 15

Gln Leu Ile Pro Ser Val Ile Ala Val Val Phe Ile Leu Leu Ser 20 25 30

Val Cys Phe Ile Ala Ser Cys Leu Val Thr His His Asn Phe Ser Arg 35 40 45

Cys Lys Arg Gly Thr Gly Val His Lys Leu Glu His His Ala Lys Leu 50 60

Lys Cys Ile Lys Glu Lys Ser Glu Leu Lys Ser Ala Glu Gly Ser Thr 65 70 75 80

Trp Asn Cys Cys Pro Ile Asp Trp Arg Ala Phe Gln Ser Asn Cys Tyr 85 90 95

Phe Pro Leu Thr Asp Asn Lys Thr Trp Ala Glu Ser Glu Arg Asn Cys 100 105 110

Ser Gly Met Gly Ala His Leu Met Thr Ile Ser Thr Glu Ala Glu Gln
115 120 125

Asn Phe Ile Ile Gln Phe Leu Asp Arg Leu Ser Tyr Phe Leu Gly 130 135 140

Leu Arg Asp Glu Asn Ala Lys Gly Gln Trp Arg Trp Val Asp Gln Thr 145 150 155 160

Pro Phe Asn Pro Arg Arg Val Phe Trp His Lys Asn Glu Pro Asp Asn 165 170 175

Ser Gln Gly Glu Asn Cys Val Val Leu Val Tyr Asn Gln Asp Lys Trp 180 185 190

Ala Trp Asn Asp Val Pro Cys Asn Phe Glu Ala Ser Arg Ile Cys Lys 195 200 205

Ile Pro Gly Thr Thr Leu Asn 210 215

<210> 317

<211> 138

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (88)

<223> Xaa equals any of the naturally occurring L-amino acids

204

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<220>
<221> SITE
<222> (116)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (118)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (119)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (129)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 317
Met Lys Leu Trp Val Ser Ala Leu Leu Met Ala Trp Phe Gly Val Leu
Ser Cys Val Gln Ala Glu Phe Phe Thr Ser Ile Gly His Met Thr Asp
                                 25
Leu Ile Tyr Ala Glu Lys Glu Leu Val Gln Ser Leu Lys Glu Tyr Ile
Leu Val Glu Glu Ala Lys Leu Ser Lys Ile Lys Ser Trp Ala Asn Lys
                         55
Met Glu Ala Leu Thr Ser Lys Ser Ala Ala Asp Ala Glu Gly Tyr Leu
Ala His Pro Val Asn Ala Tyr Xaa Leu Val Lys Arg Leu Asn Thr Asp
Trp Pro Ala Leu Glu Asp Leu Ala Cys Arg Thr Gln Leu Gln Val Leu
Ser Pro Thr Xaa Leu Xaa Xaa Gly Lys Phe Phe Pro Thr Asp Glu Gly
Xaa Asp Arg Ser Trp Pro Lys Pro Leu Met
                        135
<210> 318
<211> 56
<212> PRT
<213> Homo sapiens
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<220> <221> SITE

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<222> (13)
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<223> Xaa equals any of the naturally occurring L-amino acids

## <400> 318

Asn Phe Phe Pro Phe Phe Pro Phe Phe Phe Phe Gly Xaa Phe Phe Phe 1 5 10 15

Leu Gly Phe Pro Gln Lys Lys Ile Ser Pro Pro Gln Lys Lys Lys 20 25 30

Lys Lys Lys Lys Lys Lys Lys 50 55

<210> 319

<211> 230

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (150)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (194)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (227)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 319

Met Ser Phe Leu Cys Ser Trp Leu Leu Phe Ala Met Ala Trp Trp Leu 1 5 10 15

Ile Ala Phe Ala His Gly Asp Leu Ala Pro Ser Glu Gly Thr Ala Glu
20 25 30

Pro Cys Val Thr Ser Ile His Ser Phe Ser Ser Ala Phe Leu Phe Ser 35 40 45

Ile Glu Val Gln Val Thr Ile Gly Phe Gly Gly Arg Met Val Thr Glu
50 60

Glu Cys Pro Leu Ala Ile Leu Ile Leu Ile Val Gln Asn Ile Val Gly
65 70 75 80

Leu Met Ile Asn Ala Ile Met Leu Gly Cys Ile Phe Met Lys Thr Ala 85 90 95 Gln Ala His Arg Arg Ala Glu Thr Leu Ile Phe Ser Lys His Ala Val 100 105 110

Ile Ala Leu Arg His Gly Arg Leu Cys Phe Met Leu Arg Val Gly Asp 115 120 125

Leu Arg Lys Ser Met Ile Ile Ser Ala Thr Ile His Met Gln Val Val 130 135 140

Arg Lys Thr Thr Ser Xaa Glu Gly Glu Val Val Pro Leu His Gln Val 145 150 155 160

Asp Ile Pro Met Glu Asn Gly Val Gly Gly Asn Ser Ile Phe Leu Val 165 170 175

Ala Pro Leu Ile Ile Tyr His Val Ile Asp Ala Asn Ser Pro Leu Tyr 180 185 190

Asp Xaa Ala Pro Ser Asp Leu His His His Gln Asp Leu Glu Ile Ile 195 200 205

Val Ile Leu Glu Gly Val Val Glu Thr Thr Gly Ile Thr Thr Gln Ala 210 215 220

Arg Pro Xaa Thr Trp Arg 225 230

<210> 320

<211> 145

<212> PRT

<213> Homo sapiens

<400> 320

Gly Pro Gln Pro Thr Gly Ser Ser Asp Pro Arg Leu Ser Pro Arg Ala 1 5 10 15

Pro Ala Gln Ala Gln Arg Ala His Gly Gln Gly Gln Ala Gln Val Gln
20 25 30

His Leu Ser Arg Phe Pro Val Leu Ser His Gly Leu Ser Gly Pro Pro  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

His Ala Cys Val His Thr Asp His Val Val Cys Ser Pro Ala Arg Ala 50 55 60

Trp Cys Glu Ala Gly Pro Ala Ser Ala Gln Pro Pro Pro Ala Ala His 65 70 75 80

Pro Gly Cys Tyr Lys Ala Leu Val Thr Met Leu Phe Leu Ala Ser Ala 85 90 95

Gly Thr Cys Thr Gly Leu Phe Leu Ser Leu Leu Pro Thr Gln Phe
100 105 110

Arg Thr Gly Ser Pro Leu Ser Pro Ala Gln Gly Cys Arg Gly Cys Gly

115 120 125

Arg Tyr Trp Ala Leu Glu Leu Cys Val Gln Pro Val Leu Gly Pro His 130 135 140

Asp 145

<210> 321

<211> 97

<212> PRT

<213> Homo sapiens

<400> 321

Met Ala Leu Pro Leu Arg Pro Leu Thr Arg Gly Leu Ala Ser Ala Ala 1 5 10 15

Lys Gly Gly His Gly Gly Ala Gly Ala Arg Thr Trp Arg Leu Leu Thr 20 25 30

Phe Val Leu Ala Leu Pro Ser Val Ala Leu Cys Thr Phe Asn Ser Tyr 35 40 45

Leu His Ser Gly His Arg Pro Arg Pro Glu Phe Arg Pro Tyr Gln His 50 55 60

Leu Arg Ile Arg Thr Lys Pro Tyr Pro Trp Gly Asp Gly Asn His Thr 65 70 75 80

Leu Phe His Asn Ser His Val Asn Pro Leu Pro Thr Gly Tyr Glu His
85 90 95

Pro

<210> 322

<211> 218

<212> PRT

<213> Homo sapiens

<400> 322

Met Thr Gln Pro Val Pro Arg Leu Ser Val Pro Ala Ala Leu Ala Leu
1 5 10 15

Gly Ser Ala Ala Leu Gly Ala Ala Phe Ala Thr Gly Leu Phe Leu Ala
20 25 30

Asp Pro Gly Ala Ala Ala Gly Gly Phe Tyr Asp Asp Leu Arg Ala Gly 35 40 45

Pro Ala Leu Gly Gln Pro Gly Ala Ala His Pro Gly Gln Glu Gly Ala 50 55 60

Gly Pro Gly His Leu His Gly Leu Leu Arg Pro Gly Pro Gly Pro Gly 65 70 75 80

Ala Ala Arg Gly Arg Ala Arg Gly Asp Leu Arg Gly Gly Arg Ala Ala 85 90 95

Pro Gly Ala Gly Thr Ala Pro Val Glu Ala Glu Ala Glu His Lys Ile 100 105 110

Asp Leu Arg Leu Lys Pro Ala Leu Glu Thr Leu Asp Glu Leu Leu Ala 115 120 125

Ala Gly Glu Ala Gly Thr Phe Asp Val Ala Val Val Asp Ala Asp Lys
130 135 140

Glu Asn Cys Ser Ala Tyr Tyr Glu Arg Cys Leu Gln Leu Leu Arg Pro 145 150 155 160

Gly Gly Ile Leu Ala Val Leu Arg Val Leu Trp Arg Gly Lys Val Leu 165 170 175

Gln Pro Pro Lys Gly Asp Val Ala Ala Glu Cys Val Arg Asn Leu Asn 180 185 190

Glu Arg Ile Arg Arg Asp Val Arg Val Tyr Ile Ser Leu Leu Pro Leu 195 200 205

Gly Asp Gly Leu Thr Leu Ala Phe Lys Ile 210 215

<210> 323

<211> 83

<212> PRT

<213> Homo sapiens

<400> 323

Met Pro Leu Trp Val Phe Leu Phe Leu Trp Ala Pro Gln Thr Leu Ala 1 5 10 15

Ala Thr Ala Arg Lys Leu Glu Arg Asn Gln Ile Glu Phe Ala Leu Lys
20 25 30

Cys Phe Tyr Gly Asp Lys Met Ile Thr Lys Arg Lys Glu Val Gly Asn  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Arg Gly Arg Ala Arg Trp Leu Thr Pro Val Ile Pro Ala Ile Trp Glu 50 60

Val Glu Val Gly Gly Ser Pro Glu Val Arg Arg Ser Arg Pro Ala Trp
65 70 75 80

Pro Ile Trp

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<210> 324
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<211> 672

<212> PRT

<213> Homo sapiens

<400> 324

Met Gln Lys Ala Ser Val Leu Leu Phe Leu Ala Trp Val Cys Phe Leu 1 5 10 15

Phe Tyr Ala Gly Ile Ala Leu Phe Thr Ser Gly Phe Leu Leu Thr Arg
20 25 30

Leu Glu Leu Thr Asn His Ser Ser Cys Gln Glu Pro Pro Gly Pro Gly 35 40 45

Ser Leu Pro Trp Gly Ser Gln Gly Lys Pro Gly Ala Cys Trp Met Ala 50 55 60

Ser Arg Phe Ser Arg Val Val Leu Val Leu Ile Asp Ala Leu Arg Phe 65 70 75 80

Asp Phe Ala Gln Pro Gln His Ser His Val Pro Arg Glu Pro Pro Val 85 90 95

Ser Leu Pro Phe Leu Gly Lys Leu Ser Ser Leu Gln Arg Ile Leu Glu
100 105 110

Ile Gln Pro His His Ala Arg Leu Tyr Arg Ser Gln Val Asp Pro Pro 115 120 125

Thr Thr Met Gln Arg Leu Lys Ala Leu Thr Thr Gly Ser Leu Pro 130 135 140

Thr Phe Ile Asp Ala Gly Ser Asn Phe Ala Ser His Ala Ile Val Glu
145 150 155 160

Asp Asn Leu Ile Lys Gln Leu Thr Ser Ala Gly Arg Arg Val Val Phe 165 170 175

Met Gly Asp Asp Thr Trp Lys Asp Leu Phe Pro Gly Ala Phe Ser Lys 180 185 190

Ala Phe Phe Pro Ser Phe Asn Val Arg Asp Leu Asp Thr Val Asp 195 200 205

Asn Gly Ile Leu Glu His Leu Tyr Pro Thr Met Asp Ser Gly Glu Trp 210 215 220

Asp Val Leu Ile Ala His Phe Leu Gly Val Asp His Cys Gly His Lys 225 230 235 240

His Gly Pro His His Pro Glu Met Ala Lys Lys Leu Ser Gln Met Asp 245 250 255

Gln Val Ile Gln Gly Leu Val Glu Arg Leu Glu Asn Asp Thr Leu Leu 260 265 270

Val Val Ala Gly Asp His Gly Met Thr Thr Asn Gly Asp His Gly Gly Asp Ser Glu Leu Glu Val Ser Ala Ala Leu Phe Leu Tyr Ser Pro Thr 295 Ala Val Phe Pro Ser Thr Pro Pro Glu Glu Pro Glu Val Ile Pro Gln 310 315 Val Ser Leu Val Pro Thr Leu Ala Leu Leu Gly Leu Pro Ile Pro Phe Gly Asn Ile Gly Glu Val Met Ala Glu Leu Phe Ser Gly Glu Glu 345 Asp Ser Gln Pro His Ser Ser Ala Leu Ala Gln Ala Ser Ala Leu His Leu Asn Ala Gln Gln Val Ser Arg Phe Leu His Thr Tyr Ser Ala Ala Thr Gln Asp Leu Gln Ala Lys Glu Leu His Gln Leu Gln Asn Leu Phe 390 Ser Lys Ala Ser Ala Asp Tyr Gln Trp Leu Leu Gln Ser Pro Lys Gly 405 410 Ala Glu Ala Thr Leu Pro Thr Val Ile Ala Glu Leu Gln Gln Phe Leu 420 425 430 Arg Gly Ala Arg Ala Met Cys Ile Glu Ser Trp Ala Arg Phe Ser Leu 440 Ser Phe Leu Leu His Leu Leu Ala Ala Gly Ile Pro Val Thr Thr Pro Gly Pro Phe Thr Val Pro Trp Gln Ala Val Ser Ala Trp Ala Leu 475 Met Ala Thr Gln Thr Phe Tyr Ser Thr Gly His Gln Pro Val Phe Pro Ala Ile His Trp His Ala Ala Phe Val Gly Phe Pro Glu Gly His Gly Ser Cys Thr Trp Leu Pro Ala Leu Leu Val Gly Ala Asn Thr Phe Ala Ser His Leu Leu Phe Ala Val Gly Cys Pro Leu Leu Leu Trp Pro 530 Phe Leu Cys Glu Ser Gln Gly Leu Arg Lys Arg Gln Gln Pro Pro Gly Asn Glu Ala Asp Ala Arg Val Arg Pro Glu Glu Glu Glu Glu Pro Leu

570

Met Glu Met Arg Leu Arg Asp Ala Pro Gln His Phe Tyr Ala Ala Leu 580 585 590

Leu Gln Leu Gly Leu Lys Tyr Leu Phe Ile Leu Gly Ile Gln Ile Leu 595 600 605

Ala Cys Ala Leu Ala Ala Ser Ile Leu Arg Arg His Leu Met Val Trp 610 615 620

Lys Val Phe Ala Pro Lys Phe Ile Phe Glu Ala Val Gly Phe Ile Val 625 630 635 640

Ser Ser Val Gly Leu Leu Gly Ile Ala Leu Val Met Arg Val Asp 645 650 655

Gly Ala Val Ser Ser Trp Phe Arg Gln Leu Phe Leu Ala Gln Gln Arg
660 665 670

<210> 325

<211> 34

<212> PRT

<213> Homo sapiens

<400> 325

Met Ala Trp Leu Ala Lys Leu Leu Pro Ala Ser Ile Lys Val Gly Ser 1 5 10 15

Glu Pro Val Val Arg Ala Leu Arg Arg Cys Met Val Val Gly Gly
20 25 30

Ser Thr

<210> 326

<211> 109

<212> PRT

<213> Homo sapiens

<400> 326

Met Leu Ser Leu Pro Trp Ala Phe Leu Ser Val Met Phe Ser Phe Ser 1 5 10 15

Cys Ser Phe Ser Asp Phe Ser Cys Leu Cys Cys Ser Gln Ala Cys Pro 20 25 30

Ser Val Ser Thr Asp Thr Gln Cys Leu Val Ser Gly Gln Leu Arg Gly
35 40 45

Gly Gly Phe Lys Gln Asn Ser Asp Ser Leu Gly Trp Gly Ile Arg Asn

50 55 60

Trp Gly Lys Leu Asn Asp Pro Glu Ile Pro Pro Arg Gly Val Ser Gly 65 70 75 80

Arg Ile Cys Ala Trp Thr Val Ala Glu Pro Phe Gln Cys Ser Phe Gly 85 90 95

Ser Asp Phe Ile Ser Leu Asn Lys Val Pro Ile Ser Leu 100 105

<210> 327

<211> 83

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (11)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (12)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (39)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (45)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 327

Leu Lys Thr Val Pro Met Val Ala Ser Val Xaa Xaa Gly Trp Thr Gln
1 5 10 15

Pro Trp Thr Gly Met Trp Leu Pro Pro Thr Leu Ser Arg Gln Pro Cys
20 25 30

Leu Leu Ser Ala Pro Ala Xaa Pro Arg Ala Tyr Val Xaa Trp Gly Asp 35 40 45

Trp Gly Ser Leu Phe Glu Glu Cys Ser Ser Leu Ser Ala Met Gly Gln 50 60

Asp Ser Phe Ala Met Ala Pro Pro Arg Gly Lys Ser Val Gln Ala Asp 65 70 75 80

Lys Gly Ser

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<210> 328
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<211> 331

<212> PRT

<213> Homo sapiens

<400> 328

Met Ser Arg Tyr Leu Leu Pro Leu Ser Ala Leu Gly Thr Val Ala Gly 1 5 10 15

Ala Ala Val Leu Leu Lys Asp Tyr Val Thr Gly Gly Ala Cys Pro Ser 20 25 30

Lys Ala Thr Ile Pro Gly Lys Thr Val Ile Val Thr Gly Ala Asn Thr 35 40 45

Gly Ile Gly Lys Gln Thr Ala Leu Glu Leu Ala Arg Arg Gly Gly Asn 50 55 60

Ile Ile Leu Ala Cys Arg Asp Met Glu Lys Cys Glu Ala Ala Ala Lys 65 70 75 80

Asp Ile Arg Gly Glu Thr Leu Asn His His Val Asn Ala Arg His Leu 85 90 95

Asp Leu Ala Ser Leu Lys Ser Ile Arg Glu Phe Ala Ala Lys Ile Ile 100 105 110

Glu Glu Glu Arg Val Asp Ile Leu Ile Asn Asn Ala Gly Val Met 115 120 125

Arg Cys Pro His Trp Thr Thr Glu Asp Gly Phe Glu Met Gln Phe Gly 130 135 140

Leu Lys Ala Ser Ala Pro Ser Arg Ile Ile Asn Leu Ser Ser Leu Ala 165 170 175

His Val Ala Gly His Ile Asp Phe Asp Leu Asn Trp Gln Thr Arg
180 185 190

Lys Tyr Asn Thr Lys Ala Ala Tyr Cys Gln Ser Lys Leu Ala Ile Val 195 200 205

Leu Phe Thr Lys Glu Leu Ser Arg Arg Leu Gln Gly Ser Gly Val Thr 210 215 220

Val Asn Ala Leu His Pro Gly Val Ala Arg Thr Glu Leu Gly Arg His 225 230 235 240

Thr Gly Ile His Gly Ser Thr Phe Ser Ser Thr Thr Leu Gly Pro Ile 245 250 255

Phe Trp Leu Leu Val Lys Ser Pro Glu Leu Ala Ala Gln Pro Ser Thr

260 265 270

Tyr Leu Ala Val Ala Glu Glu Leu Ala Asp Val Ser Gly Lys Tyr Phe 275 280 285

Asp Gly Leu Lys Gln Lys Ala Pro Ala Pro Glu Ala Glu Asp Glu Glu 290 295 300

Val Ala Arg Arg Leu Trp Ala Glu Ser Ala Arg Leu Val Gly Leu Glu 305 310 315 320

Ala Pro Ser Val Arg Glu Gln Pro Leu Pro Arg 325 330

<210> 329

<211> 105

<212> PRT

<213> Homo sapiens

<400> 329

Met Gly Trp Thr Met Arg Leu Val Thr Ala Ala Leu Leu Gly Leu 1 5 10 15

Met Met Val Val Thr Gly Asp Glu Asp Glu Asp Ser Pro Cys Ala His 20 25 30

Glu Ala Leu Leu Asp Glu Asp Thr Leu Phe Cys Gln Phe Arg Ala Pro 35 40 45

Arg Leu Glu Ser Arg Gly Pro Ile Leu Arg Thr Pro Arg Ile His Gln 50 55 60

Gln Ala Pro Ser Leu Arg Lys Arg Leu Met Thr Leu Arg Leu His Ala 65 70 75 80

Arg Lys Met Ser Phe Asp Phe Lys Pro Ser Ser Gln Lys Arg Ser Phe 85 90 95

Val Phe Ile Val Thr Glu Asp Phe Cys 100 105

<210> 330

<211> 89

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (79)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

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<222> (84)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (86)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (87)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 330
Met Gly Ala Pro Trp Gly Gln Pro Ser Val Ala His His Thr Leu Leu
Phe Phe Phe Phe Phe Glu Met Glu Ser Cys Ser Val Ala Gln Ala
                                 25
Gly Val His Leu Pro Asp Val Ser Ser Leu Gln Pro Pro Pro Gly
Phe Lys Arg Phe Ser Cys Leu Ser Leu Leu Ser Ser Trp Asp Tyr Arg
Cys Ala Pro Thr His Pro Ala Asn Phe Cys Ile Cys Arg Arg Xaa Gly
 65
                     70
                                         75
Val Ser Pro Xaa Trp Xaa Xaa Trp Cys
                 85
<210> 331
<211> 49
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (14)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (21)
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<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (22)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (37)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (49)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 331
Ile Cys Pro Ser Pro Gly Cys Leu Leu Leu Xaa Pro Xaa Phe Xaa
Pro Glu Asp Phe Xaa Xaa Leu Pro Pro Pro Phe Gly Ile Pro Gly
                                 25
Leu Pro Cys Pro Xaa Leu Leu Val Arg Cys Phe Pro Ile Gly Gly Pro
                             40
Xaa
<210> 332
<211> 205
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100 105 110

Ser His Ala His Ala Gln Leu Ser Gln Asp Pro Pro Gln Ala Leu Pro 115 120 125

Gly Pro Gly Ala Gln Pro Asp Gln Val His Pro Val Arg Gln Glu His 130 135 140

Val Asp Gly Gly Ala Arg Ser Glu Ala Ala Gln Leu Cys Gly Glu 145 150 155 160

Gly Ala Arg Glu Ala Gly Leu Arg Leu Ala Ser Pro Gly Lys Gly Pro 165 170 175

Leu Ala Arg Arg His Leu Pro Asp Gly Ser Gln Pro Gly Pro Gln Arg
180 185 190

Pro Gln Gly Thr Gly Leu Gln Lys Gly Asp Glu Glu Val 195 200 205

<210> 333

<211> 556

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (94)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 333

Asp Ser Gly Gln Trp Arg Gly Pro Arg Cys Pro Ala Val Thr Lys

1 10 15

Ser Trp Arg His His Leu Pro Pro Arg Val Met Ala Pro Leu Ala Leu 20 25 30

His Leu Leu Val Leu Val Pro Ile Leu Leu Ser Leu Val Ala Ser Gln 35 40 45

Asp Trp Lys Ala Glu Arg Ser Gln Asp Pro Phe Glu Lys Cys Met Gln 50 60

Asp Pro Asp Tyr Glu Gln Leu Leu Lys Val Thr Ile Leu Glu Ala Asp 65 70 75 80

Asn Arg Ile Gly Gly Arg Ile Phe Thr Tyr Arg Asp Gln Xaa Thr Gly
85 90 95

Trp Ile Gly Glu Leu Gly Ala Met Arg Met Pro Ser Ser His Arg Ile 100 105 110

Leu His Lys Leu Cys Gln Gly Leu Gly Leu Asn Leu Thr Lys Phe Thr 115 120 125

- Gln Tyr Asp Lys Asn Thr Trp Thr Glu Val His Glu Val Lys Leu Arg 130 135 140
- Asn Tyr Val Val Glu Lys Val Pro Glu Lys Leu Gly Tyr Ala Leu Arg 145 150 155 160
- Pro Gln Glu Lys Gly His Ser Pro Glu Asp Ile Tyr Gln Met Ala Leu 165 170 175
- Asn Gln Ala Leu Lys Asp Leu Lys Ala Leu Gly Cys Arg Lys Ala Met 180 185 190
- Lys Lys Phe Glu Arg His Thr Leu Leu Glu Tyr Leu Leu Gly Glu Gly
  195 200 205
- Asn Leu Ser Arg Pro Ala Val Gln Leu Leu Gly Asp Val Met Ser Glu 210 215 220
- Asp Gly Phe Phe Tyr Leu Ser Phe Ala Glu Ala Leu Arg Ala His Ser 225 230 235 240
- Cys Leu Ser Asp Arg Leu Gln Tyr Ser Arg Ile Val Gly Gly Trp Asp
  245 250 255
- Leu Leu Pro Arg Ala Leu Leu Ser Ser Leu Ser Gly Leu Val Leu Leu 260 265 270
- Asn Ala Pro Val Val Ala Met Thr Gln Gly Pro His Asp Val His Val 275 280 285
- Gln Ile Glu Thr Ser Pro Pro Ala Arg Asn Leu Lys Val Leu Lys Ala 290 295 300
- Asp Val Val Leu Leu Thr Ala Ser Gly Pro Ala Val Lys Arg Ile Thr 305 310 315 320
- Phe Ser Pro Pro Leu Pro Arg His Met Gln Glu Ala Leu Arg Arg Leu 325 330 335
- His Tyr Val Pro Ala Thr Lys Val Phe Leu Ser Phe Arg Arg Pro Phe 340 345 350
- Trp Arg Glu Glu His Ile Glu Gly Gly His Ser Asn Thr Asp Arg Pro 355 360 365
- Ser Arg Met Ile Phe Tyr Pro Pro Pro Arg Glu Gly Ala Leu Leu Leu 370 375 380
- Ala Ser Tyr Thr Trp Ser Asp Ala Ala Ala Ala Phe Ala Gly Leu Ser 385 390 395
- Arg Glu Glu Ala Leu Arg Leu Ala Leu Asp Asp Val Ala Ala Leu His 405 410 415
- Gly Pro Val Val Arg Gln Leu Trp Asp Gly Thr Gly Val Val Lys Arg 420 425 430

Trp Ala Glu Asp Gln His Ser Gln Gly Gly Phe Val Val Gln Pro Pro 435 440 445

Ala Leu Trp Gln Thr Glu Lys Asp Asp Trp Thr Val Pro Tyr Gly Arg
450 455 460

Ile Tyr Phe Ala Gly Glu His Thr Ala Tyr Pro His Gly Trp Val Glu 465 470 475 480

Thr Ala Val Lys Ser Ala Leu Arg Ala Ala Ile Lys Ile Asn Ser Arg 485 490 495

Lys Gly Pro Ala Ser Asp Thr Ala Ser Pro Glu Gly His Ala Ser Asp
500 505 510

Met Glu Gly Gln Gly His Val His Gly Val Ala Ser Ser Pro Ser His 515 520 525

Asp Leu Ala Lys Glu Glu Gly Ser His Pro Pro Val Gln Gly Gln Leu 530 540

Ser Leu Gln Asn Thr Thr His Thr Arg Thr Ser His 545 550 555

<210> 334

<211> 173

<212> PRT

<213> Homo sapiens

<400> 334

Met Ala Pro Leu Ala Leu His Leu Leu Val Leu Val Pro Ile Leu Leu 1 5 10 15

Ser Leu Val Ala Ser Gln Asp Trp Lys Ala Glu Arg Ser Gln Asp Pro 20 25 30

Phe Glu Lys Cys Met Gln Asp Pro Asp Tyr Glu Gln Leu Leu Lys Val 35 40 45

Val Thr Trp Gly Leu Asn Arg Thr Leu Lys Pro Gln Arg Val Ile Val
50 60

Val Gly Ala Gly Val Ala Gly Leu Val Ala Ala Lys Val Leu Ser Asp
65 70 75 80

Ala Gly His Lys Val Thr Ile Leu Glu Ala Asp Asn Arg Ile Gly Gly
85 90 95

Arg Ile Phe Thr Tyr Arg Asp Gln Asn Thr Gly Trp Ile Gly Glu Leu 100 105 110

Gly Ala Met Arg Met Pro Ser Ser His Arg Ile Leu His Lys Leu Cys 115 120 125

Gln Gly Leu Gly Leu Asn Leu Thr Lys Phe Thr Gln Tyr Asp Lys Asn

130 135 140

Thr Trp Thr Glu Val His Glu Val Lys Leu Arg Asn Tyr Val Val Glu 145 150 155 160

Lys Val Pro Glu Lys Leu Gly Tyr Ala Leu Arg Pro Gln 165 170

<210> 335

<211> 127

<212> PRT

<213> Homo sapiens

<400> 335

Met Leu Leu Pro Leu Leu Ser Ser Leu Leu Gly Gly Ser Gln Ala
1 5 10 15

Met Asp Gly Arg Phe Trp Ile Arg Val Glu Ser Val Met Val Pro 20 25 30

Glu Gly Leu Cys Ile Ser Val Pro Cys Ser Phe Ser Tyr Pro Arg Gln
35 40 45

Asp Trp Thr Gly Ser Thr Pro Ala Tyr Gly Tyr Trp Phe Lys Ala Val 50 60

Thr Glu Thr Thr Lys Gly Ala Pro Val Ala Thr Asn His Gln Ser Arg 65 70 75 80

Glu Val Glu Met Ser Thr Arg Gly Arg Phe Pro Gly Ser Leu Gly Asp 85 90 95

Pro Ala Lys Gly Asn Cys Ser Leu Val Ile Arg Arg Arg Ala Asp Ala 100 105 110

Arg Met Ser His Ser Thr Ser Phe Gly Trp Arg Glu Glu Ala Met 115 120 125

<210> 336

<211> 346

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (252)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (309)

<223> Xaa equals any of the naturally occurring L-amino acids

- <400> 336
- Met Leu Leu Pro Leu Leu Ser Ser Leu Leu Gly Gly Ser Gln Ala 1 5 10 15
- Met Asp Gly Arg Phe Trp Ile Arg Val Glu Ser Val Met Val Pro 20 25 30
- Glu Gly Leu Cys Ile Ser Val Pro Cys Ser Phe Ser Tyr Pro Arg Gln
  35 40 45
- Asp Trp Thr Gly Ser Thr Pro Ala Tyr Gly Tyr Trp Phe Lys Ala Val
  50 60
- Thr Glu Thr Thr Lys Gly Ala Pro Val Ala Thr Asn His Gln Ser Arg
  65 70 75 80
- Glu Val Glu Met Ser Thr Arg Gly Arg Phe Gln Leu Thr Gly Asp Pro
  85 90 95
- Ala Lys Gly Asn Cys Ser Leu Val Ile Arg Asp Ala Gln Met Gln Asp 100 105 110
- Glu Ser Gln Tyr Phe Phe Arg Val Glu Arg Gly Ser Tyr Val Arg Tyr 115 120 125
- Asn Phe Met Asn Asp Gly Phe Phe Leu Lys Val Thr Ala Leu Thr Gln 130 135 140
- Lys Pro Asp Val Tyr Ile Pro Glu Thr Leu Glu Pro Gly Gln Pro Val 145 150 155 160
- Thr Val Ile Cys Val Phe Asn Trp Ala Phe Glu Glu Cys Pro Pro Pro 165 170 175
- Ser Phe Ser Trp Thr Gly Ala Ala Leu Ser Ser Gln Gly Thr Lys Pro 180 185 190
- Thr Thr Ser His Phe Ser Val Leu Ser Phe Thr Pro Arg Pro Gln Asp 195 200 205
- His Asn Thr Asp Leu Thr Cys His Val Asp Phe Ser Arg Lys Gly Val 210 215 220
- Ser Val Gln Arg Thr Val Arg Leu Arg Val Ala Tyr Ala Pro Arg Asp 225 230 235 240
- Leu Val Ile Ser Ile Ser Arg Asp Asn Thr Pro Xaa Leu Glu Pro Gln 245 250 255
- Pro Gln Gly Asn Val Pro Tyr Leu Glu Ala Gln Lys Gly Gln Phe Leu 260 265 270
- Arg Leu Cys Ala Ala Asp Ser Gln Pro Pro Ala Thr Leu Ser Trp 275 280 285
- Val Leu Gln Asn Arg Val Leu Ser Ser His Pro Trp Gly Pro Arg 290 295 300

Pro Leu Gly Leu Xaa Leu Pro Gly Val Lys Ala Gly Asp Ser Gly Ala 305 310 315 320

Thr Pro Ala Glu Arg Arg Thr Gly Leu Ala Pro Ser Ser Glu Pro Trp 325 330 335

Thr Ser Leu Cys Ser Ile Leu Gln Arg Thr 340 345

<210> 337

<211> 710

<212> PRT

<213> Homo sapiens

<400> 337

Gln Ala Cys Leu Arg Gln Ala Leu Arg Leu Cys Gly Asp Ala Thr 1 5 10 15

Ala Thr Ala Ala Val Leu Ala Ala Gly Arg Val Pro Gly Tyr Gly Trp
20 25 30

Glu Ile Leu Asp Thr Ser Ala Gly Val Ser Asp Gly Ala Gly Gly Leu 35 40 45

Cys Ile Ser Val Pro Cys Ser Phe Ser Tyr Pro Arg Gln Asp Trp Thr 50 55 60

Gly Ser Thr Pro Ala Tyr Gly Tyr Trp Phe Lys Ala Val Thr Glu Thr 65 70 75 80

Thr Lys Gly Ala Pro Val Ala Thr Asn His Gln Ser Arg Glu Val Glu
85 90 95

Met Ser Thr Arg Gly Arg Phe Gln Leu Thr Gly Asp Pro Ala Lys Gly
100 105 110

Asn Cys Ser Leu Val Ile Arg Asp Ala Gln Met Gln Asp Glu Ser Gln
115 120 125

Tyr Phe Phe Arg Val Glu Arg Gly Ser Tyr Val Arg Tyr Asn Phe Met 130 135 140

Asn Asp Gly Phe Phe Leu Lys Val Thr Ala Leu Thr Gln Lys Pro Asp 145 150 155 160

Val Tyr Ile Pro Glu Thr Leu Glu Pro Gly Gln Pro Val Thr Val Ile 165 170 175

Cys Val Phe Asn Trp Ala Phe Glu Glu Cys Pro Pro Pro Ser Phe Ser 180 185 190

Trp Thr Gly Ala Ala Leu Ser Ser Gln Gly Thr Lys Pro Thr Thr Ser 195 200 205

His Phe Ser Val Leu Ser Phe Thr Pro Arg Pro Gln Asp His Asn Thr Asp Leu Thr Cys His Val Asp Phe Ser Arg Lys Gly Val Ser Ala Gln 235 Arg Thr Val Arg Leu Arg Val Ala Tyr Ala Pro Arg Asp Leu Val Ile Ser Ile Ser Arg Asp Asn Thr Pro Ala Leu Glu Pro Gln Pro Gln Gly Asn Val Pro Tyr Leu Glu Ala Gln Lys Gly Gln Phe Leu Arg Leu Leu 280 Cys Ala Ala Asp Ser Gln Pro Pro Ala Thr Leu Ser Trp Val Leu Gln 295 Asn Arg Val Leu Ser Ser His Pro Trp Gly Pro Arg Pro Leu Gly 310 Leu Glu Leu Pro Gly Val Lys Ala Gly Asp Ser Gly Arg Tyr Thr Cys Arg Ala Glu Asn Arg Leu Gly Ser Gln Gln Arg Ala Leu Asp Leu Ser 345 Val Gln Tyr Pro Pro Glu Asn Leu Arg Val Met Val Ser Gln Ala Asn 360 Arg Thr Val Leu Glu Asn Leu Gly Asn Gly Thr Ser Leu Pro Val Leu 375 Glu Gly Gln Ser Leu Cys Leu Val Cys Val Thr His Ser Ser Pro Pro 390 395 Ala Arg Leu Ser Trp Thr Gln Arg Gly Gln Val Leu Ser Pro Ser Gln Pro Ser Asp Pro Gly Val Leu Glu Leu Pro Arg Val Gln Val Glu His 425 Glu Gly Glu Phe Thr Cys His Ala Arg His Pro Leu Gly Ser Gln His Val Ser Leu Ser Leu Ser Val His Tyr Ser Pro Lys Leu Leu Gly Pro Ser Cys Ser Trp Glu Ala Glu Gly Leu His Cys Ser Cys Ser Ser Gln Ala Ser Pro Ala Pro Ser Leu Arg Trp Trp Leu Gly Glu Glu Leu Leu 490

Glu Gly Asn Ser Ser Gln Asp Ser Phe Glu Val Thr Pro Ser Ser Ala

505

500

510

Gly Pro Trp Ala Asn Ser Ser Leu Ser Leu His Gly Gly Leu Ser Ser 515 520 525

Gly Leu Arg Leu Arg Cys Glu Ala Trp Asn Val His Gly Ala Gln Ser 530 540

Gly Ser Ile Leu Gln Leu Pro Asp Lys Lys Gly Leu Ile Ser Thr Ala 545 550 555 560

Phe Ser Asn Gly Ala Phe Leu Gly Ile Gly Ile Thr Ala Leu Leu Phe 565 570 575

Leu Cys Leu Ala Leu Ile Ile Met Lys Ile Leu Pro Lys Arg Arg Thr 580 585 590

Gln Thr Glu Thr Pro Arg Pro Arg Phe Ser Arg His Ser Thr Ile Leu 595 600 605

Asp Tyr Ile Asn Val Val Pro Thr Ala Gly Pro Leu Ala Gln Lys Arg 610 615 620

Asn Gln Lys Ala Thr Pro Asn Ser Pro Arg Thr Pro Leu Pro Pro Gly 625 630 635 640

Ala Pro Ser Pro Glu Ser Lys Lys Asn Gln Lys Lys Gln Tyr Gln Leu 645 650 655

Pro Ser Phe Pro Glu Pro Lys Ser Ser Thr Gln Ala Pro Glu Ser Gln 660 665 670

Glu Ser Gln Glu Glu Leu His Tyr Ala Thr Leu Asn Phe Pro Gly Val 675 680 685

Arg Pro Arg Pro Glu Ala Arg Met Pro Lys Gly Thr Gln Ala Asp Tyr 690 695 700

Ala Glu Val Lys Phe Gln 705 710

<210> 338

<211> 146

<212> PRT

<213> Homo sapiens

<400> 338

Met Thr Met Arg Ser Leu Leu Arg Thr Pro Phe Leu Cys Gly Leu Leu 1 5 10 15

Trp Ala Phe Cys Ala Pro Gly Ala Arg Ala Glu Glu Pro Ala Ala Ser 20 25 30

Phe Ser Gln Pro Gly Ser Met Gly Leu Asp Lys Asn Thr Val His Asp
35 40 45

Gln Glu His Ile Met Glu His Leu Glu Gly Val Ile Asn Lys Pro Glu

50 55

Ala Glu Met Ser Pro Gln Glu Leu Gln Leu His Tyr Phe Lys Met His 65 70 75 80

Asp Tyr Asp Gly Asn Asn Leu Leu Asp Gly Leu Glu Leu Ser Thr Ala 85 90 95

Ile Thr His Val His Lys Glu Glu Gly Ser Glu Gln Ala Pro Leu Met
100 105 110

Ser Glu Asp Glu Leu Ile Asn Ile Ile Asp Gly Val Leu Arg Asp Asp 115 120 125

Asp Lys Asn Asn Asp Gly Tyr Ile Asp Tyr Ala Glu Phe Ala Lys Ser 130 140

Leu Gln 145

<210> 339

<211> 110

<212> PRT

<213> Homo sapiens

<400> 339

Met Ala Ser Pro Ala Ser Val Val Pro Ala Val Gly Phe Leu Arg Leu 1 5 10 15

His Ser Met Leu Leu Ile Ala Cys Pro Pro His Ala Ser Leu Gly Leu 20 25 30

Pro Leu His Val Arg Gln Gln Pro Val Glu Leu Arg His Leu Pro Phe 35 40 45

Pro Cys Cys Ser Ser Leu Ser Pro Leu Ser Ser Trp Ala Tyr Arg Val
50 55 60

Leu Pro Phe Cys Pro Cys Trp Ser Thr Val Ala Gln Ser Arg Leu Thr 65 70 75 80

Ala Ala Ser Thr Ser Gln Thr Gln Val Val Leu Pro Pro Gln Pro His
85 90 95

Pro Arg Pro Pro Gln Pro Pro Lys Val Leu Ala Leu Gln Thr
100 105 110

<210> 340

<211> 168

<212> PRT

<213> Homo sapiens

<400> 340

Met Glu Asp Gly Asp Lys Arg Cys Lys Leu Leu Gly Ile Gly Ile 1 5 10 15

Leu Val Leu Leu Ile Ile Val Ile Leu Gly Val Pro Leu Ile Ile Phe 20 25 30

Thr Ile Lys Ala Asn Ser Glu Ala Cys Arg Asp Gly Leu Arg Ala Val 35 40 45

Met Glu Cys Arg Asn Val Thr His Leu Leu Gln Gln Glu Leu Thr Glu
50 60

Ala Gln Lys Gly Phe Gln Asp Val Glu Ala Gln Ala Ala Thr Cys Asn 65 70 75 80

His Thr Val Met Ala Leu Met Ala Ser Leu Asp Ala Glu Lys Ala Gln 85 90 95

Gly Gln Lys Lys Val Glu Glu Leu Glu Gly Glu Ile Thr Thr Leu Asn 100 105 110

His Lys Leu Gln Asp Ala Ser Ala Glu Val Glu Arg Leu Arg Arg Glu
115 120 125

Asn Gln Val Leu Ser Val Arg Ile Ala Asp Lys Lys Tyr Tyr Pro Ser 130 135 140

Ser Gln Asp Ser Ser Ser Ala Ala Pro Gln Leu Leu Ile Val Leu 145 150 155 160

Leu Gly Leu Ser Ala Leu Leu Gln 165

<210> 341

<211> 227

<212> PRT

<213> Homo sapiens

<400> 341

Met Ala Gly Val Gly Ala Gly Pro Leu Arg Ala Met Gly Arg Gln Ala 1 5 10 15

Leu Leu Leu Ala Leu Cys Ala Thr Gly Ala Gln Gly Leu Tyr Phe 20 25 30

His Ile Gly Glu Thr Glu Lys Arg Cys Phe Ile Glu Glu Ile Pro Asp 35 40 45

Glu Thr Met Val Ile Gly Asn Tyr Arg Thr Gln Met Trp Asp Lys Gln 50 60

Lys Glu Val Phe Leu Pro Ser Thr Pro Gly Leu Gly Met His Val Glu 65 70 75 80

Val Lys Asp Pro Asp Gly Lys Val Val Leu Ser Arg Gln Tyr Gly Ser

95

Glu Gly Arg Phe Thr Phe Thr Ser His Thr Pro Gly Asp His Gln Ile 100 105 110

Cys Leu His Ser Asn Ser Thr Arg Met Ala Leu Phe Ala Gly Gly Lys 115 120 125

Leu Arg Val His Leu Asp Ile Gln Val Gly Glu His Ala Asn Asn Tyr 130 135 140

Pro Glu Ile Ala Ala Lys Asp Lys Leu Thr Glu Leu Gln Leu Arg Ala 145 150 155 160

Arg Gln Leu Leu Asp Gln Val Glu Gln Ile Gln Lys Glu Gln Asp Tyr 165 170 175

Gln Arg Tyr Arg Glu Glu Arg Phe Arg Leu Thr Ser Glu Ser Thr Asn 180 185 190

Gln Arg Val Leu Trp Trp Ser Ile Ala Gln Thr Val Ile Leu Ile Leu 195 200 205

Thr Gly Ile Trp Gln Met Arg His Leu Lys Ser Phe Phe Glu Ala Lys 210 215 220

Lys Leu Val 225

<210> 342

<211> 57

<212> PRT

<213> Homo sapiens

<400> 342

Met Ala Gly Val Gly Ala Gly Pro Leu Arg Ala Met Gly Arg Gln Ala 1 5 10 15

Leu Leu Leu Ala Leu Cys Ala Thr Gly Ala Gln Gly Leu Tyr Phe
20 25 30

His Ile Gly Glu Thr Glu Lys Arg Cys Phe Ile Glu Glu Ile Pro Asp 35 40 45

Glu Thr Met Val Ile Gly Gln Ala Gly 50 55

<210> 343

<211> 121

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (34)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 343

Leu Ser Ala Phe Ile Met Leu Cys Tyr Gln His His His Pro Ala Pro
1 5 10 15

Glu Leu Phe His Leu Leu Lys Leu Lys Ile Cys Thr Tyr Phe Val Leu 20 25 30

Phe Xaa Arg Trp Ser Leu Ala Leu Leu Pro Arg Leu Glu Arg Ser Gly 35 40 45

Ala Ile Ser Ala His Cys Thr Leu Arg Leu Ser Gly Ser Ser Asp Ser 50 55 60

Pro Ala Ser Ala Ser Gln Val Ala Gly Ile Thr Gly Lys Cys His His 65 70 75 80

Ala Trp Leu Ile Phe Val Phe Leu Val Glu Thr Gly Phe His His Val 85 90 95

Gly Gln Ala Gly Leu Glu Leu Leu Ala Ser Gly Asn Pro Leu Pro Gln
100 105 110

Pro Pro Lys Val Leu Gly Leu Gln Ala 115 120

<210> 344

<211> 93

<212> PRT

<213> Homo sapiens

<400> 344

Met Ala Arg Leu Gln Thr Ala Leu Leu Val Val Leu Val Leu Ala 1 5 10 15

Val Ala Leu Gln Ala Thr Glu Ala Gly Pro Tyr Gly Ala Asn Met Glu 20 25 30

Asp Ser Val Cys Cys Arg Asp Tyr Val Arg Tyr Arg Leu Pro Leu Arg 35 40 45

Val Val Lys His Phe Tyr Trp Thr Ser Asp Ser Cys Pro Arg Pro Gly
50 60

Val Val Leu Leu Thr Phe Arg Asp Lys Glu Ile Cys Ala Asp Pro Arg 65 70 75 80

Val Pro Trp Val Lys Met Ile Leu Asn Lys Leu Ser Gln 85 90 <210> 345

<211> 93

<212> PRT

<213> Homo sapiens

<400> 345

Met Ala Arg Leu Gln Thr Ala Leu Leu Val Val Leu Val Leu Leu Ala 1 5 10 15

Val Ala Leu Gln Ala Thr Glu Ala Gly Pro Tyr Gly Ala Asn Met Glu 20 25 30

Asp Ser Val Cys Cys Arg Asp Tyr Val Arg Tyr Arg Leu Pro Leu Arg 35 40 45

Val Val Lys His Phe Tyr Trp Thr Ser Asp Ser Cys Pro Arg Pro Gly 50 60

Val Val Leu Leu Thr Phe Arg Asp Lys Glu Ile Cys Ala Asp Pro Arg 65 70 75 80

Val Pro Trp Val Lys Met Ile Leu Asn Lys Leu Ser Gln 85 90

<210> 346

<211> 48

<212> PRT

<213> Homo sapiens

<400> 346

Ser Leu Leu Ser Lys Leu Val Met Tyr Tyr Arg Tyr Asn Cys Thr Lys  $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$ 

Ile Val Gln Pro Lys Thr Ile Cys Asn Cys Leu Leu Phe Tyr Cys Ile 20 25 30

Leu Phe Val Phe Leu Arg Pro Leu Ile Ala Phe Cys Asn Leu Met Ala 35 40 45

<210> 347

<211> 206

<212> PRT

<213> Homo sapiens

<400> 347

Met Asp Pro Phe Val Val Leu Val Leu Cys Leu Ser Phe Leu Leu Leu 1 10 15

Leu Ser Leu Trp Arg Gln Arg Ser Ala Arg Gly Asn Leu Pro Pro Gly
20 25 30

Pro Thr Pro Leu Pro Ile Ile Gly Asn Tyr His Leu Ile Asp Met Lys 35 40 45

Asp Ile Gly Gln Cys Leu Thr Asn Phe Ser Lys Ile Tyr Gly Pro Val
50 60

Phe Thr Leu Tyr Phe Gly Ser Gln Pro Ile Val Ile Leu His Gly Tyr 65 70 75 80

Glu Ala Met Lys Glu Ala Phe Ile Asp Tyr Gly Glu Glu Phe Ser Gly 85 90 95

Arg Gly Arg Ile Pro Val Phe Asp Lys Val Ser Lys Gly Lys Gly Ile 100 105 110

Gly Phe Ser His Gly Asn Val Trp Lys Ala Thr Arg Val Phe Thr Val 115 120 125

Asn Thr Leu Arg Asn Leu Gly Met Gly Lys Arg Thr Ile Glu Thr Lys 130 135 140

Gly Ser Pro Cys Asp Pro Gln Phe Ile Ile Gly Cys Ala Pro Cys Asn 165 170 175

Val Ile Cys Ser Ile Val Phe Gln Asn Arg Phe Asp Tyr Lys Asp Lys 180 185 190

Asp Phe Leu Ser Leu Ile Gly Lys Val Asn Glu Cys Thr Glu 195 200 205

<210> 348

<211> 95

<212> PRT

<213> Homo sapiens

<400> 348

Met Val Phe Phe Leu Leu Leu Phe Leu Arg Glu Gly Leu Ala Leu
1 5 10 15

Ser Pro Arg Leu Glu Cys Ser Ser Thr Ile Ile Ala His Tyr Ser Leu 20 25 30

Lys Phe Leu Asp Ser Ser Ala Pro Pro Ile Ser Ala Ser Pro Val Ala 35 40 45

Gly Thr Thr Ala Cys Thr Thr Ile Pro Gly Tyr Leu Phe Tyr Phe Phe 50 60

Val Glu Met Arg Ser Pro Cys Val Ala Gln Ala Gly Leu Lys His Leu 65 70 75 80

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Asp Ser Arg Asp Pro Pro Ala Ser Ala Lys Lys Lys Lys Lys B5 90 95
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<210> 349
<211> 310
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (212)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (220)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (265)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (276)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (284)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (302)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 349
Met Met Gly Ser Pro Val Ser His Leu Leu Ala Gly Phe Cys Val Trp
Val Val Leu Gly Trp Val Gly Gly Ser Val Pro Asn Leu Gly Pro Ala
Glu Gln Glu Gln Asn His Tyr Leu Ala Gln Leu Phe Gly Leu Tyr Gly
Glu Asn Gly Thr Leu Thr Ala Gly Gly Leu Ala Arg Leu Leu His Ser
Leu Gly Leu Gly Arg Val Gln Gly Leu Arg Leu Gly Gln His Gly Pro
65
                     70
                                          75
```

Leu Thr Gly Arg Ala Ala Ser Pro Ala Ala Asp Asn Ser Thr His Arg

85 90 95

Pro Gln Asn Pro Glu Leu Ser Val Asp Val Trp Ala Gly Met Pro Leu
100 105 110

Gly Pro Ser Gly Trp Gly Asp Leu Glu Glu Ser Lys Ala Pro His Leu 115 120 125

Pro Arg Gly Pro Ala Pro Ser Gly Leu Asp Leu Leu His Arg Leu Leu 130 135 140

Leu Leu Asp His Ser Leu Ala Asp His Leu Asn Glu Asp Cys Leu Asn 145 150 155 160

Gly Ser Gln Leu Leu Val Asn Phe Gly Leu Ser Pro Ala Ala Pro Leu 165 170 175

Thr Pro Arg Gln Phe Ala Leu Leu Cys Pro Ala Leu Leu Tyr Gln Ile 180 185 190

Asp Ser Arg Val Cys Ile Gly Ala Pro Ala Pro Ala Pro Gly Asp 195 200 205

Leu Leu Ser Xaa Leu Leu Gln Ser Ala Leu Ala Xaa Leu Leu Leu Ser 210 225 220

Leu Pro Ser Pro Leu Ser Leu Leu Leu Leu Arg Leu Leu Gly Pro Arg 225 230 235 240

Leu Leu Arg Pro Leu Gly Phe Leu Gly Ala Leu Ala Val Gly Thr 245 250 255

Leu Cys Gly His Ala Thr Lys Pro Xaa Ser Ala Ser Gly Ala Pro Gly 260 265 270

Tyr Ala Pro Xaa Ala Ser Ala Arg Ala Gly Ala Xaa Ala Trp Gly Ala 275 280 285

Gly Leu Lys Leu Gly Ile Asn Leu Gly Trp Lys Asn Arg Xaa Leu Ala 290 295 300

Arg Glu Gln Leu Lys Ala 305 310

<210> 350

<211> 99

<212> PRT

<213> Homo sapiens

<400> 350

Leu Leu Glu Gly Arg Gln Thr Ile Gly Pro Gln Lys Ser Glu Lys Gln
1 5 10 15

Gly Thr Lys Val Phe Gly Trp Gly Leu Leu Met Leu Ser Asp Thr Ile 20 25 30 Pro Leu Glu Leu Arg Gly Gln Gly Gln Gly Gln Asn Pro Asp Ile Leu 35 40 45

Phe Phe Phe Gln Leu Pro Ala Leu Leu Arg Pro Pro Glu Pro Leu Pro 50 55 60

Thr Pro His Val Leu Leu Gln Gly Leu Gly Leu Leu Gly Gly Gly 65 70 75 80

Leu Met Leu Ala Ile Thr Leu Leu Glu Glu Arg Leu Leu Pro Val Thr 85 90 95

Thr Glu Gly

<210> 351

<211> 205

<212> PRT

<213> Homo sapiens

<400> 351

Met Cys Asp Gly Ser His Leu Ala Ser Thr Leu Arg Tyr Cys Met Thr  $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$ 

Val Ser Gly Thr Val Val Leu Val Ala Gly Thr Leu Cys Phe Ala Trp
20 . 25 30

Trp Ser Glu Gly Asp Ala Thr Ala Gln Pro Gly Gln Leu Ala Pro Pro 35 40 45

Thr Glu Tyr Pro Val Pro Glu Gly Pro Ser Pro Leu Leu Arg Ser Val
50 60

Ser Phe Val Cys Cys Gly Ala Gly Gly Leu Leu Leu Leu Ile Gly Leu 65 70 75 80

Leu Trp Ser Val Lys Ala Ser Ile Pro Gly Pro Pro Arg Trp Asp Pro 85 90 95

Tyr His Leu Ser Arg Asp Leu Tyr Tyr Leu Thr Val Glu Ser Ser Glu
100 105 110

Lys Glu Ser Cys Arg Thr Pro Lys Val Val Asp Ile Pro Thr Tyr Glu 115 120 125

Glu Ala Val Ser Phe Pro Val Ala Glu Gly Pro Pro Thr Pro Pro Ala 130 135 140

Tyr Pro Thr Glu Glu Ala Leu Glu Pro Ser Gly Ser Arg Asp Ala Leu 145 150 155 160

Leu Ser Thr Gln Pro Ala Trp Pro Pro Pro Ser Tyr Glu Ser Ile Ser 165 170 175 Leu Ala Leu Asp Ala Val Ser Ala Glu Thr Thr Pro Ser Ala Thr Arg
180 185 190

Ser Cys Ser Gly Leu Val Gln Thr Ala Arg Gly Gly Ser 195 200 205

<210> 352

<211> 167

<212> PRT

<213> Homo sapiens

<400> 352

Met Leu Thr Val Ala Leu Leu Ala Leu Leu Cys Ala Ser Ala Ser Gly
1 5 10 15

Asn Ala Ile Gln Ala Arg Ser Ser Tyr Ser Gly Glu Tyr Gly Ser 20 25 30

Gly Gly Lys Arg Phe Ser His Ser Gly Asn Gln Leu Asp Gly Pro 35 40 45

Ile Thr Ala Leu Arg Val Arg Val Asn Thr Tyr Tyr Ile Val Gly Leu 50 55 60

Gln Val Arg Tyr Gly Lys Val Trp Ser Asp Tyr Val Gly Gly Arg Asn 65 70 75 80

Gly Asp Leu Glu Glu Ile Phe Leu His Pro Gly Glu Ser Val Ile Gln 85 90 95

Val Ser Gly Lys Tyr Lys Trp Tyr Leu Lys Lys Leu Val Phe Val Thr 100 105 110

Asp Lys Gly Arg Tyr Leu Ser Phe Gly Lys Asp Ser Gly Thr Ser Phe 115 120 125

Asn Ala Val Pro Leu His Pro Asn Thr Val Leu Arg Phe Ile Ser Gly 130 135 140

Arg Ser Gly Ser Leu Ile Asp Ala Ile Gly Leu His Trp Asp Val Tyr 145 150 155 160

Pro Thr Ser Cys Ser Arg Cys 165

<210> 353

<211> 88

<212> PRT

<213> Homo sapiens

<400> 353

Met Val Met Met Gly Val Arg Met Met Leu Lys Val Met Lys Ile Pro  $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$ 

Leu Leu Thr Glu Ala Leu Pro Ala Phe Thr Val Ala Cys Trp Lys
20 25 30

Val Ala Ser Gly Ala Tyr Thr Ile Ala Val Ser Gly Ser Gly Val Thr 35 40 45

Cys Ser Arg Lys Gly Lys Val Arg Arg Lys Glu Phe Ser Ser Leu Gln 50 55 60

Glu Thr Gly Val Gly Thr Ser Tyr Leu Thr Gly Arg His Tyr Ser Trp
65 70 75 80

Met Ser Ile Cys Thr Leu Asp Ser 85

<210> 354

<211> 117

<212> PRT

<213> Homo sapiens

<400> 354

Met Ser His Leu Gly Leu His Asn Ser Phe Phe Phe Phe Leu Arg

1 10 15

Trp Ser Phe Ala Leu Val Ala Gln Ala Gly Val Gln Trp Cys Asp Leu 20 25 30

Gly Ser Pro Gln Pro Pro Pro Gly Phe Lys Gln Phe Ser Cys Leu 35 40 45

Ser Leu Pro Ser Ser Trp Asp Tyr Arg Cys Ala Pro Pro Cys Leu Ala 50 60

Asn Phe Val Phe Leu Val Glu Thr Gly Phe Leu His Val Gly Gln Ala 65 70 75 80

Gly Leu Glu Leu Leu Thr Ser Ser Asp Leu Ser Thr Ser Ala Ser Gln
85 90 95

Ser Ala Gly Ile Thr Gly Val Ser His Cys Ser Gln Gln Glu Phe Leu 100 105 110

Phe Tyr Ser Ile Gly 115

<210> 355

<211> 117

<212> PRT

<213> Homo sapiens

<400> 355

Met Ser His Leu Gly Leu His Asn Ser Phe Phe Phe Phe Leu Arg

1 5	10	15
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Trp Ser Phe Ala Leu Val Ala Gln Ala Gly Val Gln Trp Cys Asp Leu
20 25 30

Gly Ser Pro Gln Pro Pro Pro Pro Gly Phe Lys Gln Phe Ser Cys Leu 35 40

Ser Leu Pro Ser Ser Trp Asp Tyr Arg Cys Ala Pro Pro Cys Leu Ala 50 60

Asn Phe Val Phe Leu Val Glu Thr Gly Phe Leu His Val Gly Gln Ala 65 70 75 80

Gly Leu Glu Leu Leu Thr Ser Ser Asp Leu Ser Thr Ser Ala Ser Gln
85 90 95

Ser Ala Gly Ile Thr Gly Val Ser His Cys Ser Gln Gln Glu Phe Leu 100 105 110

Phe Tyr Ser Ile Gly 115

<210> 356

<211> 196

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (64)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (70)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (191)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 356

Met Lys Leu Trp Val Ser Ala Leu Leu Met Ala Trp Phe Gly Val Leu  $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$ 

Ser Cys Val Gln Ala Glu Phe Phe Thr Ser Ile Gly His Met Thr Asp 20 25 30

Leu Ile Tyr Ala Glu Lys Glu Leu Val Gln Ser Leu Lys Glu Tyr Ile 35 40 45

Leu Val Glu Glu Ala Lys Leu Ser Lys Ile Lys Ser Trp Ala Asn Xaa 50 55 60

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Met Glu Ala Leu Thr Xaa Lys Ser Ala Ala Asp Ala Glu Gly Tyr Leu 65 70 75 80
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Ala His Pro Val Asn Ala Tyr Lys Leu Val Lys Arg Leu Asn Thr Asp
85 90 95

Trp Pro Ala Leu Glu Asp Leu Val Leu Gln Asp Ser Ala Ala Gly Phe
100 105 110

Ile Ala Asn Leu Ser Val Gln Arg Gln Phe Phe Pro Thr Asp Glu Asp 115 120 125

Glu Ile Gly Ala Ala Lys Ala Leu Met Arg Leu Gln Asp Thr Tyr Arg 130 135 140

Leu Asp Pro Gly Thr Ile Ser Arg Gly Glu Leu Pro Gly Thr Lys Tyr 145 150 155 160

Gln Ala Met Leu Ser Val Asp Asp Cys Phe Gly Met Gly Arg Ser Ala 165 170 175

Tyr Asn Glu Gly Asp Tyr Tyr His Thr Val Leu Trp Met Glu Xaa Val 180 185 190

Leu Lys Gln Leu 195

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<210> 357
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<211> 457 <212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (430)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (438)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (448)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 357

Met Lys Leu Trp Val Ser Ala Leu Leu Met Ala Trp Phe Gly Val Leu 1 5 10 15

Ser Cys Val Gln Ala Glu Phe Phe Thr Ser Ile Gly His Met Thr Asp 20 25 30

- Leu Ile Tyr Ala Glu Lys Glu Leu Val Gln Ser Leu Lys Glu Tyr Ile  $35 \hspace{1cm} 40 \hspace{1cm} 45$
- Leu Val Glu Glu Ala Lys Leu Ser Lys Ile Lys Ser Trp Ala Asn Lys
  50 55 60
- Met Glu Ala Leu Thr Ser Lys Ser Ala Ala Asp Ala Glu Gly Tyr Leu 65 70 75 80
- Ala His Pro Val Asn Ala Tyr Lys Leu Val Lys Arg Leu Asn Thr Asp 85 90 95
- Trp Pro Ala Leu Glu Asp Leu Val Leu Gln Asp Ser Ala Ala Gly Phe
  100 105 110
- Ile Ala Asn Leu Ser Val Gln Arg Gln Phe Phe Pro Thr Asp Glu Asp 115 120 125
- Glu Ile Gly Ala Ala Lys Ala Leu Met Arg Leu Gln Asp Thr Tyr Arg 130 135 140
- Leu Asp Pro Gly Thr Ile Ser Arg Gly Glu Leu Pro Gly Thr Lys Tyr 145 150 155 160
- Gln Ala Met Leu Ser Val Asp Asp Cys Phe Gly Met Gly Arg Ser Ala 165 170 175
- Tyr Asn Glu Gly Asp Tyr Tyr His Thr Val Leu Trp Met Glu Gln Val 180 185 190
- Leu Lys Gln Leu Asp Ala Gly Glu Glu Ala Thr Thr Lys Ser Gln
  195 200 205
- Val Leu Asp Tyr Leu Ser Tyr Ala Val Phe Gln Leu Gly Asp Leu His 210 215 220
- Arg Ala Leu Glu Leu Thr Arg Arg Leu Leu Ser Leu Asp Pro Ser His 225 230 235 240
- Glu Arg Ala Gly Gly Asn Leu Arg Tyr Phe Glu Gln Leu Leu Glu Glu 245 250 255
- Glu Arg Glu Lys Thr Leu Thr Asn Gln Thr Glu Ala Glu Leu Ala Thr 260 265 270
- Pro Glu Gly Ile Tyr Glu Arg Pro Val Asp Tyr Leu Pro Glu Arg Asp 275 280 285
- Val Tyr Glu Ser Leu Cys Arg Gly Glu Gly Val Lys Leu Thr Pro Arg 290 295 300
- Arg Gln Lys Arg Leu Phe Cys Arg Tyr His His Gly Asn Arg Ala Pro 305 310 315 320
- Gln Leu Leu Ile Ala Pro Phe Lys Glu Glu Asp Glu Trp Asp Ser Pro 325 330 335

His Ile Val Arg Tyr Tyr Asp Val Met Ser Asp Glu Glu Ile Glu Arg 340 345 350

Ile Lys Glu Ile Ala Lys Pro Lys Leu Ala Arg Ala Thr Val Arg Asp 355 360 365

Pro Lys Thr Gly Val Leu Thr Val Ala Ser Tyr Arg Val Ser Lys Ser 370 380

Ser Trp Leu Glu Glu Asp Asp Pro Val Val Ala Arg Val Asn Arg 385 390 395 400

Arg Met Gln His Ile Thr Gly Leu Thr Val Lys Thr Ala Glu Leu Leu 405 410 415

Gln Val Ala Asn Tyr Gly Val Gly Gln Tyr Glu Pro Xaa Phe Asp 420 425 430

Phe Ser Arg Asn Asp Xaa Arg Asp Thr Phe Lys His Leu Gly Thr Xaa 435 440 445

Asn Arg Val Ala Thr Phe Leu Asn Tyr 450 455

<210> 358

<211> 97

<212> PRT

<213> Homo sapiens

<400> 358

Ala Asn Thr Phe Lys His Leu Gly Thr Gly Asn Arg Val Ala Thr Phe 1 5 10 15

Leu Asn Tyr Met Ser Asp Val Glu Ala Gly Gly Ala Thr Val Phe Pro 20 . 25 30

Asp Leu Gly Ala Ala Ile Trp Pro Lys Lys Gly Thr Ala Val Phe Trp 35 40 45

Tyr Asn Leu Leu Arg Ser Gly Glu Gly Asp Tyr Arg Thr Arg His Ala
50 60

Ala Cys Pro Val Leu Val Gly Cys Lys Trp Val Ser Asn Lys Trp Phe 65 70 75 80

His Glu Arg Gly Gln Glu Phe Leu Arg Pro Cys Gly Ser Thr Glu Val 85 90 95

Asp

<210> 359

<211> 180

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<212> PRT
<220>
<221> SITE
<222> (131)
<220>
<221> SITE
<222> (143)
<400> 359
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<213> Homo sapiens

<223> Xaa equals any of the naturally occurring L-amino acids

<223> Xaa equals any of the naturally occurring L-amino acids

Met Asp Val Gly Pro Ser Ser Leu Pro His Leu Gly Leu Lys Leu Leu

Leu Leu Leu Leu Leu Pro Leu Arg Gly Gln Ala Asn Thr Gly Cys

Tyr Gly Ile Pro Gly Met Pro Gly Leu Pro Gly Ala Pro Gly Lys Asp

Gly Tyr Asp Gly Leu Pro Gly Pro Lys Gly Glu Pro Gly Ile Pro Ala

Ile Pro Gly Ile Arg Gly Pro Lys Gly Gln Lys Gly Glu Pro Gly Leu

Pro Gly His Pro Gly Lys Asn Gly Pro Met Gly Pro Pro Gly Met Pro 90

Gly Val Pro Gly Pro Met Gly Ile Pro Gly Glu Pro Gly Glu Glu Gly

Arg Tyr Lys Gln Lys Phe Gln Ser Val Phe Thr Val Thr Arg Gln Thr

His Gln Xaa Pro Ala Pro Asn Ser Leu Ile Arg Phe Asn Ala Xaa Leu

Thr Asn Pro Gln Gly Asp Tyr Asp Thr Ser Thr Gly Lys Phe Thr Cys

Lys Val Pro Gly Leu Tyr Tyr Phe Val Tyr His Ala Ser His Thr Ala 170

Asn Leu Cys Val 180

<210> 360

<211> 112

<212> PRT

<213> Homo sapiens

<400> 360

Met Asp Val Gly Pro Ser Ser Leu Pro His Leu Gly Leu Lys Leu Leu 1 5 10 15

Leu Leu Leu Leu Leu Pro Leu Arg Gly Gln Ala Asn Thr Gly Cys
20 25 30

Tyr Gly Ile Pro Gly Met Pro Gly Leu Pro Gly Ala Pro Gly Lys Asp 35 40 45

Gly Tyr Asp Gly Leu Pro Gly Pro Lys Gly Glu Pro Gly Ile Pro Ala 50 55 60

Ile Pro Gly Ile Arg Gly Pro Lys Gly Gln Ile Gln Ala Glu Ile Pro 65 70 75 80

Val Ser Val His Gly His Ser Ala Asp Pro Pro Ala Pro Cys Thr Gln
85 90 95

Gln Pro Asp Gln Ile Gln Arg Gly Pro His Gln Pro Ala Gly Arg Leu 100 105 110

<210> 361

<211> 245

<212> PRT

<213> Homo sapiens

<400> 361

Met Asp Val Gly Pro Ser Ser Leu Pro His Leu Gly Leu Lys Leu Leu 1 5 10 15

Leu Leu Leu Leu Leu Pro Leu Arg Gly Gln Ala Asn Thr Gly Cys
20 25 30

Tyr Gly Ile Pro Gly Met Pro Gly Leu Pro Gly Ala Pro Gly Lys Asp 35 40 45

Gly Tyr Asp Gly Leu Pro Gly Pro Lys Gly Glu Pro Gly Ile Pro Ala
50 60

Ile Pro Gly Ile Arg Gly Pro Lys Gly Gln Lys Gly Glu Pro Gly Leu 65 70 75 80

Pro Gly His Pro Gly Lys Asn Gly Pro Met Gly Pro Pro Gly Met Pro
85 90 95

Gly Val Fro Gly Pro Met Gly Ile Pro Gly Glu Pro Gly Glu Glu Gly
100 105 110

Arg Tyr Lys Gln Lys Phe Gln Ser Val Phe Thr Val Thr Arg Gln Thr 115 120 125

His Gln Pro Pro Ala Pro Asn Ser Leu Ile Arg Phe Asn Ala Val Leu 130 135 140

Thr Asn Pro Gln Gly Asp Tyr Asp Thr Ser Thr Gly Lys Phe Thr Cys 145 150 155 160

Lys Val Pro Gly Leu Tyr Tyr Phe Val Tyr His Ala Ser His Thr Ala 165 170 175

Asn Leu Cys Val Leu Leu Tyr Arg Ser Gly Val Lys Val Val Thr Phe 180 185 190

Cys Gly His Thr Ser Lys Thr Asn Gln Val Asn Ser Gly Gly Val Leu 195 200 205

Leu Arg Leu Gln Val Gly Glu Glu Val Trp Leu Ala Val Asn Asp Tyr 210 215 220

Tyr Asp Met Val Gly Ile Gln Gly Ser Asp Ser Val Phe Ser Gly Phe 225 230 235 240

Leu Leu Phe Pro Asp 245

<210> 362

<211> 245

<212> PRT

<213> Homo sapiens

<400> 362

Met Asp Val Gly Pro Ser Ser Leu Pro His Leu Gly Leu Lys Leu Leu 1 5 10 15

Leu Leu Leu Leu Leu Pro Leu Arg Gly Gln Ala Asn Thr Gly Cys
20 25 30

Tyr Gly Ile Pro Gly Met Pro Gly Leu Pro Gly Ala Pro Gly Lys Asp 35 40 45

Gly Tyr Asp Gly Leu Pro Gly Pro Lys Gly Glu Pro Gly Ile Pro Ala 50 55 60

Ile Pro Gly Ile Arg Gly Pro Lys Gly Gln Lys Gly Glu Pro Gly Leu 65 70 75 80

Pro Gly His Pro Gly Lys Asn Gly Pro Met Gly Pro Pro Gly Met Pro 85 90 95

Gly Val Pro Gly Pro Met Gly Ile Pro Gly Glu Pro Gly Glu Glu Gly
100 105 110

Arg Tyr Lys Gln Lys Phe Gln Ser Val Phe Thr Val Thr Arg Gln Thr 115 120 125

His Gln Pro Pro Ala Pro Asn Ser Leu Ile Arg Phe Asn Ala Val Leu

130 135 140

Thr Asn Pro Gln Gly Asp Tyr Asp Thr Ser Thr Gly Lys Phe Thr Cys 145 150 155 160

Lys Val Pro Gly Leu Tyr Tyr Phe Val Tyr His Ala Ser His Thr Ala 165 170 175

Asn Leu Cys Val Leu Leu Tyr Arg Ser Gly Val Lys Val Val Thr Phe 180 185 190

Cys Gly His Thr Ser Lys Thr Asn Gln Val Asn Ser Gly Gly Val Leu 195 200 205

Leu Arg Leu Gln Val Gly Glu Glu Val Trp Leu Ala Val Asn Asp Tyr 210 215 220

Tyr Asp Met Val Gly Ile Gln Gly Ser Asp Ser Val Phe Ser Gly Phe 225 230 235 240

Leu Leu Phe Pro Asp

<210> 363

<211> 137

<212> PRT

<213> Homo sapiens

<400> 363

Met Arg Arg Gly Arg Ala Gly Pro Gly Arg Ala Gly Gly Ala Arg Ser 1 5 10 15

Ala Ser Trp Met Ser Arg Leu Arg Ala Leu Leu Gly Leu Gly Leu Leu 20 25 30

Val Ala Gly Ser Arg Leu Pro Arg Ile Lys Ser Gln Thr Ile Ala Cys 35 40 45

Arg Ser Gly Pro Thr Trp Gly Pro Gln Arg Leu Asn Ser Gly Gly 50 55 60

Arg Trp Asp Ser Glu Val Met Ala Ser Thr Val Val Lys Tyr Leu Ser 65 70 75 80

Gln Glu Glu Ala Gln Ala Val Asp Gln Glu Leu Phe Asn Glu Tyr Gln 85 90 95

Phe Ser Val Asp Gln Leu Met Glu Leu Ala Gly Leu Ser Cys Ala Thr 100 105 110

Ala Ile Ala Lys Ala Tyr Pro Pro Thr Ser Met Ser Arg Ser Pro Pro 115 120 125

Thr Val Leu Val Ile Cys Gly Pro Gly 130 135 <210> 364

<211> 307

<212> PRT

<213> Homo sapiens

<400> 364

Met Arg Arg Gly Arg Ala Gly Pro Gly Arg Ala Gly Gly Ala Arg Ser 1 5 10 15

Ala Ser Trp Met Ser Arg Leu Arg Ala Leu Leu Gly Leu Gly Leu Leu 20 25 30

Val Ala Gly Ser Arg Leu Pro Arg Ile Lys Ser Gln Thr Ile Ala Cys 35 40 45

Arg Ser Gly Pro Thr Trp Trp Gly Pro Gln Arg Leu Asn Ser Gly Gly 50 55 60

Arg Trp Asp Ser Glu Val Met Ala Ser Thr Val Val Lys Tyr Leu Ser 65 70 75 80

Gln Glu Glu Ala Gln Ala Val Asp Gln Glu Leu Phe Asn Glu Tyr Gln 85 90 95

Phe Ser Val Asp Gln Leu Met Glu Leu Ala Gly Leu Ser Cys Ala Thr 100 105 110

Ala Ile Ala Lys Ala Tyr Pro Pro Thr Ser Met Ser Arg Ser Pro Pro 115 120 125

Thr Val Leu Val Ile Cys Gly Pro Gly Asn Asn Gly Gly Asp Gly Leu 130 135 140

Val Cys Ala Arg His Leu Lys Leu Phe Gly Tyr Glu Pro Thr Ile Tyr 145 150 155 160

Tyr Pro Lys Arg Pro Asn Lys Pro Leu Phe Thr Ala Leu Val Thr Gln 165 170 175

Cys Gln Lys Met Asp Ile Pro Phe Leu Gly Glu Met Pro Ala Glu Pro 180 185 190

Met Thr Ile Asp Glu Leu Tyr Glu Leu Val Val Asp Ala Ile Phe Gly 195 200 205

Phe Ser Phe Lys Gly Asp Val Arg Glu Pro Phe His Ser Ile Leu Ser 210 215 220

Val Leu Lys Gly Leu Thr Val Pro Ile Ala Ser Ile Asp Ile Pro Ser 225 230 235 240

Gly Trp Asp Val Glu Lys Gly Asn Ala Gly Gly Ile Gln Pro Asp Leu 245 250 255

Leu Ile Ser Leu Thr Ala Pro Lys Lys Ser Ala Thr Gln Phe Thr Gly 260 265 270

Arg Tyr His Tyr Leu Gly Gly Arg Phe Val Pro Pro Ala Leu Glu Lys 275 280 285

Lys Tyr Gln Leu Asn Leu Pro Pro Tyr Pro Asp Thr Glu Cys Val Tyr 290 295 300

Arg Leu Gln 305

<210> 365

<211> 57

<212> PRT

<213> Homo sapiens

<400> 365

Lys Leu Arg Glu Met Val Met Gln Lys Asn Ile Leu Leu Trp Thr Ile  $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$ 

Phe Leu Lys His Lys Lys Asn Ala Gln Phe Cys Leu His Ser Leu Arg 20 25 30

Met Tyr Leu Ser Glu Asp Gln Asn Lys Gln Ser Arg Cys Ile Ser Thr 35 40 45

Arg Gln Lys Pro Ile Leu Lys Phe Pro 50 55

<210> 366

<211> 54

<212> PRT

<213> Homo sapiens

<400> 366

Met Trp Arg Val Pro Gly Thr Thr Arg Arg Pro Val Thr Gly Glu Ser 1 5 10 15

Leu Gly Cys Thr Gly Gln Arg His Ala Ala Ala Ala His Ala Cys Pro 20 25 30

Pro Gly Gly Pro His Leu Gly Arg Glu Asp Val Trp Pro Trp Arg Arg 35 40 45

Gln Val Phe Gln His His
50

<210> 367

<211> 85

<212> PRT

<213> Homo sapiens

<400> 367

Met Lys Ile Pro Val Leu Pro Ala Val Val Leu Leu Ser Leu Leu Val

1 10 15

Leu His Ser Ala Gln Gly Ala Thr Leu Gly Gly Pro Glu Glu Glu Ser 20 25 30

Thr Ile Glu Asn Tyr Ala Ser Arg Pro Glu Ala Phe Lys Ala Asp Glu 35 40 45

Phe Leu Asn Trp His Ala Leu Phe Glu Ser Ile Lys Arg Lys Leu Pro 50 55 60

Phe Leu Asn Trp Asp Ala Phe Pro Lys Leu Lys Gly Leu Arg Ser Ala 65 70 75 80

Thr Pro Asp Ala Gln

<210> 368

<211> 334

<212> PRT

<213> Homo sapiens

<400> 368

Met Asn Leu Leu Leu Leu Ala Val Leu Cys Leu Gly Thr Ala Leu

1 5 10 15

Ala Thr Pro Lys Phe Asp Gln Thr Phe Ser Ala Glu Trp His Gln Trp 20 25 30

Lys Ser Thr His Arg Arg Leu Tyr Gly Thr Asn Glu Glu Glu Trp Arg 35 40 45

Arg Ala Ile Trp Glu Lys Asn Met Arg Met Ile Gln Leu His Asn Gly 50 55 60

Glu Tyr Ser Asn Gly Gln His Gly Phe Ser Met Glu Met Asn Ala Phe 65 70 75 80

Gly Asp Met Thr Asn Glu Glu Phe Arg Gln Val Val Asn Gly Tyr Arg 85 90 95

His Gln Lys His Lys Lys Gly Arg Leu Phe Gln Glu Pro Leu Met Leu
100 105 110

Lys Ile Pro Lys Ser Val Asp Trp Arg Glu Lys Gly Cys Val Thr Pro 115 120 125

Val Lys Asn Gln Gly Gln Cys Gly Ser Cys Trp Ala Phe Ser Ala Ser 130 135 140

Gly Cys Leu Glu Gly Gln Met Phe Leu Lys Thr Gly Lys Leu Ile Ser

145 150 155 160

Leu Ser Glu Gln Asn Leu Val Asp Cys Ser His Ala Gln Gly Asn Gln
165 170 175

Gly Cys Asn Gly Gly Leu Met Asp Phe Ala Phe Gln Tyr Ile Lys Glu 180 185 190

Asn Gly Gly Leu Asp Ser Glu Glu Ser Tyr Pro Tyr Glu Ala Lys Asp 195 200 205

Gly Ser Cys Lys Tyr Arg Ala Glu Phe Ala Val Ala Asn Asp Thr Gly 210 215 220

Phe Val Asp Ile Pro Gln Gln Glu Lys Ala Leu Met Lys Ala Val Ala 225 230 235 240

Thr Val Gly Pro Ile Ser Val Ala Met Asp Ala Ser His Pro Ser Leu 245 250 255

Gln Phe Tyr Ser Ser Gly Ile Tyr Tyr Glu Pro Asn Cys Ser Ser Lys 260 265 270

Asn Leu Asp His Gly Val Leu Leu Val Gly Tyr Gly Tyr Glu Gly Thr 275 280 285

Asp Ser Asn Lys Asn Lys Tyr Trp Leu Val Lys Asn Ser Trp Gly Ser 290 295 300

Glu Trp Gly Met Glu Gly Tyr Ile Lys Ile Ala Lys Asp Arg Asp Asn 305 310 315 320

His Cys Gly Leu Ala Thr Ala Ala Ser Tyr Pro Val Val Asn 325 330

<210> 369

<211> 88

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (29)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (40)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (54)

<223> Xaa equals any of the naturally occurring L-amino acids

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<220>
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<221> SITE

<222> (55)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (66)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (85)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 369

Ala Phe Lys Ala Arg Ser Ala Phe Ser Val Leu Phe Cys Phe Ser Phe 1 5 10 15

Phe Phe Leu Ala Met Arg Ala Lys Ile Thr Glu Trp Xaa Leu Lys Arg
20 25 30

Glu Val Cys Phe Gln Leu Phe Xaa Phe Ala Arg Arg Trp Glu Gly Gly 35 40 45

Asp Cys Cys Val Leu Xaa Xaa Gly Met Ala Leu Leu Glu Cys Val Val 50 60

His Xaa His Gly Cys Phe Cys Val Leu Val Ala Ser Cys Cys Phe 65 70 75 80

Leu Leu Val Trp Xaa Ser His Thr 85

<210> 370

<211> 82

<212> PRT

<213> Homo sapiens

<400> 370

Met Ser Leu Phe Val Leu Leu Phe Ala His Thr Arg Leu Cys Ser Ser  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Val Phe Gly Asp Arg Tyr Leu Tyr Val Asp Leu Val Gly Gln Glu Lys
20 25 30

Leu Arg Cys Lys Lys Pro Thr Pro Gln His Ala Gly Phe Asn Gly Lys 35 40 45

Val Asp Gln Lys Asp Asn Lys Leu Gly Lys Leu Ile Asn Cys Val Leu 50 55 60

Leu Lys Ala Ile Cys Asp Phe Ile Leu Lys Ala Leu Gln Met Tyr Leu 65 70 75 80

<400> 372

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<210> 371
<211> 136
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (98)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (123)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 371
Met Arg Met Lys Tyr Leu Trp Thr Ser His Met Cys Val Phe Ala Ser
Phe Gly Leu Cys Ser Pro Glu Ile Trp Glu Leu Leu Leu Lys Ser Val
His Leu Tyr Asn Pro Lys Arg Phe Trp Pro Gly Met Met Asp Glu Leu
                             40
Ser Glu Leu Arg Glu Phe Tyr Asp Pro Asp Thr Val Glu Leu Met Asn
                        55
Trp Ile Asn Ser Asn Thr Pro Arg Lys Ala Val Phe Ala Gly Ser Met
Gln Leu Leu Ala Gly Val Lys Leu Cys Thr Gly Arg Thr Leu Thr Asn
His Xaa His Tyr Glu Asp Ser Ser Leu Arg Glu Arg Thr Arg Ala Val
Tyr Gln Ile Tyr Ala Lys Arg Ala Pro Glu Xaa Ser Ala Cys Pro Pro
Lys Val Leu Arg His Trp Thr Thr
<210> 372
<211> 78
<212> PRT
<213> Homo sapiens
```

Leu Trp Leu Thr Ala Ser Leu Pro Gly Arg Ser Lys Arg Pro Ala Ala

1 5 10 15

Ala Ala Pro Arg His Ser Asp Leu Gly Gly Asp Asn Leu Lys Glu Trp
20 25 30

Leu Cys Phe Leu Leu Thr Glu Asn Pro Leu Asp Phe Ala Ser Glu Leu 35 40 45

Ala Val Arg Arg Pro Ser Lys Tyr Asn Arg Ser Ala Leu Asn Gly Leu 50 55 60

Cys Leu Cys Asp Ser Gln Ala Pro Glu Ser Pro Ser Leu Ser 65 70 75

<210> 373

<211> 107

<212> PRT

<213> Homo sapiens

<400> 373

Met Gly Arg Gly Trp Val Val Asp Gly Val Ser Val Val Ser Cys Gly

1 5 10 15

Arg Val Ile Leu Leu Phe Leu Phe His Ile Leu Pro Pro Gln 20 25 30

Ala Lys Val Val Ser Phe Gly Phe His Cys Val Asp Cys Ala Gly Ala 35 40 45

Trp Arg Leu Pro Glu Lys Phe Gly Ala Arg Gln Ala Pro Gly Cys Arg 50 55 60

His Gly Glu Ala Glu Lys Leu Phe Phe Trp Phe Leu His Asn Leu Arg
65 70 75 80

Gly Ala Lys Thr Leu Pro Arg Lys Glu Glu Gly Val Gln Glu Pro Asp 85 90 95

Phe Trp Arg Glu Gly Ser Ser Gln Pro Ala Gly
100 105

<210> 374

<211> 146

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (12)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

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<222> (13)
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (144)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 374

Met Ile Ile Ser Thr Ile Gly Glu Ile Ala Leu Xaa Xaa Leu Asn Ile 1 5 10 15

Leu Gly Ile Asn Phe Leu Gly Arg Arg Leu Ser Leu Ser Ile Thr Met
20 25 30

Gly Cys Thr Ala Leu Phe Cys Leu Leu Leu Asn Ile Cys Thr Ser Ser 35 40 45

Ala Gly Leu Ile Gly Phe Leu Phe Met Leu Arg Ala Leu Val Ala Ala 50 55 60

Asn Phe Asn Thr Val Tyr Ile Tyr Thr Ala Glu Val Tyr Pro Thr Thr 65 70 75 80

Met Arg Ala Leu Gly Met Gly Thr Ser Gly Ser Leu Cys Arg Ile Gly 85 90 95

Ala Met Val Ala Pro Phe Ile Ser Gln Val Leu Met Ser Ala Ser Ile 100 105 110

Leu Gly Ala Leu Cys Leu Phe Ser Ser Val Cys Val Val Cys Ala Ile 115 120 125

Ser Ala Phe Thr Leu Pro Ile Glu Thr Lys Gly Arg Ala Leu Gln Xaa 130 135 140

Ile Lys 145

<210> 375

<211> 205

<212> PRT

<213> Homo sapiens

<400> 375

Met Ala Val Val Phe Ser Thr Leu Val Cys Leu Ser Arg Leu Tyr Thr 1 5 10 15

Gly Met His Thr Val Leu Asp Val Leu Gly Gly Val Leu Ile Thr Ala
20 25 30

Leu Leu Ile Val Leu Thr Tyr Pro Ala Trp Thr Phe Ile Asp Cys Leu 35 40 45

Asp Ser Ala Ser Pro Leu Phe Pro Val Cys Val Ile Val Val Pro Phe

50 55 60

Phe Leu Cys Tyr Asn Tyr Pro Val Ser Asp Tyr Tyr Ser Pro Thr Arg 65 70 75 80

Ala Asp Thr Thr Ile Leu Ala Ala Gly Ala Gly Val Thr Ile Gly 85 90 95

Phe Trp Ile Asn His Phe Phe Gln Leu Val Ser Lys Pro Ala Glu Ser 100 105 110

Leu Pro Val Ile Gln Asn Ile Pro Pro Leu Thr Thr Tyr Met Leu Val 115 120 125

Leu Gly Leu Thr Lys Phe Ala Val Gly Ile Val Leu Ile Leu Leu Val 130 135 140

Arg Gln Leu Val Gln Asn Leu Ser Leu Gln Val Leu Tyr Ser Trp Phe 145 150 155 160

Lys Val Val Thr Arg Asn Lys Glu Ala Arg Arg Arg Leu Glu Ile Glu 165 170 175

Val Pro Tyr Lys Phe Val Thr Tyr Thr Ser Val Gly Ile Cys Ala Thr 180 185 190

Thr Phe Val Pro Met Leu His Arg Phe Leu Gly Leu Pro 195 200 205

<210> 376

<211> 125

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (20)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (21)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (26)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 376

Met Leu Pro Arg Gly Arg Pro Arg Ala Leu Gly Ala Ala Ala Leu Leu 1 5 10 15

Leu Leu Xaa Xaa Leu Gly Phe Leu Xaa Phe Gly Gly Asp Leu Gly
20 25 30

Cys Glu Arg Arg Glu Pro Gly Gly Arg Ala Gly Ala Pro Gly Cys Phe  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Pro Gly Pro Leu Met Pro Arg Val Pro Pro Asp Gly Arg Leu Arg Arg 50 55 60

Ala Ala Leu Asp Gly Asp Pro Gly Ala Gly Pro Gly Asp His Asn 65 70 75 80

Arg Ser Asp Cys Gly Pro Gln Pro Pro Pro Pro Lys Cys Glu Val 85 90 95

Gly Ala Arg Gly Pro Gly Gly Gly Ser Pro Gly Gly Ala Ala Pro Glu 100 105 110

Pro Gly Leu Leu Asp Ile Cys Gly Asn His Ser Thr Trp 115 120 125

<210> 377

<211> 99

<212> PRT

<213> Homo sapiens

<400> 377

Met Ile Leu Trp Arg Arg Arg His Thr Leu Val Phe Arg Leu Phe Ser 1 5 10 15

Phe Phe Ala Leu Val Ser Pro His Leu Cys Asp Phe Ile Tyr Leu Trp
20 25 30

Ser Leu Met Met Val Thr Tyr Arg Trp Gly Phe Gly Val Asp Ile Leu
35 40 45

Phe Val Asp Val Asp Ala Ile Pro Phe Cys Leu Leu Val Phe Leu Leu 50 55 60

Thr Val Arg Ser Leu Ser Gly Arg Ser Val Gly Val Ala Gly Gly Pro 65 70 75 80

Leu Pro Thr Leu Phe Ala Trp Val Ser Pro Val Glu Ala Ala Glu Gln
85 90 95

Gln Ile Leu

<210> 378

<211> 135

<212> PRT

<213> Homo sapiens

<400> 378

Met Ala Trp Trp Pro Asn Ser Thr Cys Trp Leu Leu Thr Ala Val Thr

1 5 10 15

Met Ala Leu Ala Thr Arg Cys Val Pro Gln Glu Leu Pro Ser Gly Ser 20 25 30

Glu Val Pro Gly Leu Glu Ala Val Gln Val Val Arg Ser Gly Leu Ala 35 40 45

Gly Pro His Arg Cys Ser Cys Arg His Pro Val Leu Ala Leu Thr Gly 50 60

Gly Arg Asp Thr Gln Gly Pro Gly Ala Ser Gly Pro Val Leu Gln Trp 65 70 75 80

Pro Pro Leu Leu Ser Gln Arg Val Gln Ala Trp Leu Leu Lys Ala Met 85 90 95

Cys Leu Arg Leu Thr Leu Lys Arg Ala Cys Gln Ala Ala Pro Gly Gly
100 105 110

Ser Ser His Gly Gly Arg Cys Pro Ala Val Cys Trp Pro Pro Gly Gly 115 120 125

Arg Asp Gly Arg Gly Ala Ala 130 135

<210> 379

<211> 82

<212> PRT

<213> Homo sapiens

<400> 379

Met Gly Phe Ser Pro Cys Ile Phe Trp Gly Arg Gly Leu Phe Ser Ala  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Thr Ser Trp Gly Leu Leu Pro Phe Ala Val Pro Ile Thr Thr Val Val 20 25 30

Gly Arg Pro Ile Pro Val Pro Gln Arg Leu His Pro Thr Glu Glu Glu 35 40 45

Val Asn His Tyr His Ala Leu Tyr Met Thr Ala Leu Glu Gln Leu Phe 50 60

Glu Glu His Lys Glu Ser Cys Gly Val Pro Ala Ser Thr Cys Leu Thr 65 70 75 80

Phe Ile

<210> 380

<211> 370

<212> PRT

- <213> Homo sapiens
- <220>
- <221> SITE
- <222> (156)
- <223> Xaa equals any of the naturally occurring L-amino acids
- <400> 380
- Arg Arg Gly Ala Gly Leu Arg Leu His Gln Pro Thr Arg Ser Gln Pro
  1 5 10 15
- Cys Thr Gln Arg Asp Val Lys Asp Ala Leu Ser Arg Val Gln Ala Ala 20 25 30
- Pro Ala Cys Trp Leu Ala Cys Pro Pro Ala Cys Ser Thr Arg Pro Ala 35 40 45
- Cys Ser Met Thr Leu Trp Asn Gly Val Leu Pro Phe Tyr Pro Gln Pro 50 60
- Arg His Ala Ala Gly Phe Ser Val Pro Leu Leu Ile Val Ile Leu Val 65 70 75 80
- Phe Leu Ala Leu Ala Ala Ser Phe Leu Leu Ile Leu Pro Gly Ile Arg
  85 90 95
- Gly His Ser Arg Trp Phe Trp Leu Val Arg Val Leu Leu Ser Leu Phe 100 105 110
- Ile Gly Ala Glu Ile Val Ala Val His Phe Ser Ala Glu Trp Phe Val 115 120 125
- Gly Thr Val Asn Thr Asn Thr Ser Tyr Lys Ala Phe Ser Ala Ala Arg 130 135 140
- Val Thr Ala Arg Val Gly Leu Leu Val Gly Leu Xaa Gly Ile Asn Ile 145 150 155 160
- Thr Leu Thr Gly Thr Pro Val His Gln Leu Asn Glu Thr Ile Asp Tyr 165 170 175
- Asn Glu Gln Phe Thr Trp Arg Leu Lys Glu Asn Tyr Ala Ala Glu Tyr 180 185 190
- Ala Asn Ala Leu Glu Lys Gly Leu Pro Asp Pro Val Leu Tyr Leu Ala 195 200 205
- Glu Lys Phe Thr Pro Ser Ser Pro Cys Gly Leu Tyr His Gln Tyr His 210 215 220
- Leu Ala Gly His Tyr Ala Ser Ala Thr Leu Trp Val Ala Phe Cys Phe 225 230 235 240
- Trp Leu Leu Ser Asn Val Leu Leu Ser Thr Pro Ala Pro Leu Tyr Gly
  245 250 255
- Gly Leu Ala Leu Leu Thr Thr Gly Ala Phe Ala Leu Phe Gly Val Phe

260 265 270

Ala Leu Ala Ser Ile Ser Ser Val Pro Leu Cys Pro Leu Arg Leu Gly 275 280 285

Ser Ser Ala Leu Thr Thr Gln Tyr Gly Ala Ala Phe Trp Val Thr Leu 290 295 300

Ala Thr Gly Val Leu Cys Leu Phe Leu Gly Gly Ala Val Val Ser Leu 305 310 315 320

Gln Tyr Val Arg Pro Ser Ala Leu Arg Thr Leu Leu Asp Gln Ser Ala 325 330 335

Lys Asp Cys Ser Gln Glu Arg Gly Gly Ser Pro Leu Ile Leu Gly Asp 340 345 350

Pro Leu His Lys Gln Ala Ala Leu Pro Asp Leu Lys Cys Ile Thr Thr 355 360 365

Asn Leu 370

<210> 381

<211> 100

<212> PRT

<213> Homo sapiens

<400> 381

Met Thr Arg Ala Pro Leu Leu Leu Cys Val Ala Leu Val Leu Leu 1 5 10 15

Gly His Val Asn Gly Ala Thr Val Arg Asn Glu Asp Lys Trp Lys Pro
20 25 30

Leu Asn Asn Pro Arg Asn Arg Asp Leu Phe Phe Arg Arg Leu Gln Ala 35 40 45

Tyr Phe Lys Gly Arg Gly Leu Asp Leu Gly Thr Phe Pro Asn Pro Phe 50 55 60

Pro Thr Asn Glu Asn Pro Arg Pro Leu Ser Phe Gln Ser Glu Leu Thr 65 70 75 80

Ala Ser Ala Ser Ala Asp Tyr Glu Glu Gln Lys Asn Ser Phe His Asn 85 90 95

Tyr Leu Lys Gly 100

<210> 382

<211> 59

<212> PRT

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<213> Homo sapiens
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<220>

<221> SITE

<222> (8)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 382

Phe Leu Gln Lys Glu Cys Cys Xaa Lys Met Gln His Cys Pro Asn Ile 1 5 10 15

Ser Leu Cys Ile Ser Lys Tyr Phe Asn Val Ala Phe Leu Gly Gly Leu 20 25 30

Leu Ile Leu Tyr Met Lys Asn Lys Ile Phe Val Gln Glu Pro Lys Lys 35 40 45

<210> 383

<211> 151

<212> PRT

<213> Homo sapiens

<400> 383

Met Arg Arg Leu Leu Val Thr Ser Leu Val Val Val Leu Leu Trp

1 5 10 15

Glu Ala Gly Ala Val Pro Ala Pro Lys Val Pro Ile Lys Met Gln Val 20 25 30

Lys His Trp Pro Ser Glu Gln Asp Pro Glu Lys Ala Trp Gly Ala Arg
35 40 45

Val Val Glu Pro Pro Glu Lys Asp Asp Gln Leu Val Val Leu Phe Pro 50 60

Val Gln Lys Pro Lys Leu Leu Thr Thr Glu Glu Lys Pro Arg Gly Gln 65 70 75 80

Gly Arg Gly Pro Ile Leu Pro Gly Thr Lys Ala Trp Met Glu Thr Glu 85 90 95

Asp Thr Leu Gly Arg Val Leu Ser Pro Glu Pro Asp His Asp Ser Leu
100 105 110

Tyr His Pro Pro Pro Glu Glu Asp Gln Gly Glu Glu Arg Pro Arg Leu 115 120 125

Trp Val Met Pro Asn His Gln Val Leu Leu Gly Pro Glu Glu Asp Gln 130 135 140

Asp Pro Ile Phe Pro Pro Gln 145 150 <210> 384

<211> 151

<212> PRT

<213> Homo sapiens

<400> 384

Met Arg Arg Leu Leu Val Thr Ser Leu Val Val Val Leu Leu Trp
1 5 10 15

Glu Ala Gly Ala Val Pro Ala Pro Lys Val Pro Ile Lys Met Gln Val 20 25 30

Lys His Trp Pro Ser Glu Gln Asp Pro Glu Lys Ala Trp Gly Ala Arg
35 40 45

Val Val Glu Pro Pro Glu Lys Asp Asp Gln Leu Val Val Leu Phe Pro 50 55 60

Val Gln Lys Pro Lys Leu Leu Thr Thr Glu Glu Lys Pro Arg Gly Gln 65 70 75 80

Gly Arg Gly Pro Ile Leu Pro Gly Thr Lys Ala Trp Met Glu Thr Glu 85 90 95

Asp Thr Leu Gly Arg Val Leu Ser Pro Glu Pro Asp His Asp Ser Leu
100 105 110

Tyr His Pro Pro Pro Glu Glu Asp Gln Gly Glu Glu Arg Pro Arg Leu 115 120 125

Trp Val Met Pro Asn His Gln Val Leu Leu Gly Pro Glu Glu Asp Gln 130 135 140

Asp His Ile Tyr His Pro Gln 145 150

<210> 385

<211> 142

<212> PRT

<213> Homo sapiens

<400> 385

Met Arg Arg Leu Leu Val Thr Ser Leu Val Val Val Leu Leu Trp

1 5 10 15

Glu Ala Gly Ala Val Pro Ala Pro Lys Val Pro Ile Lys Met Gln Val 20 25 30

Lys His Trp Pro Ser Glu Gln Asp Pro Glu Lys Ala Trp Gly Ala Arg 35 40 45

Val Val Glu Pro Pro Glu Lys Asp Asp Gln Leu Val Val Leu Phe Pro

50 55 60

Val Gln Lys Pro Lys Leu Leu Thr Thr Glu Glu Lys Pro Arg Gly Thr
65 70 . 75 80

Lys Ala Trp Met Glu Thr Glu Asp Thr Leu Gly Arg Val Leu Ser Pro 85 90 95

Glu Pro Asp His Asp Ser Leu Tyr His Pro Pro Pro Glu Glu Asp Gln
100 105 110

Gly Glu Glu Arg Pro Arg Leu Trp Val Met Pro Asn His Gln Val Leu 115 120 125

Leu Gly Pro Glu Glu Asp Gln Asp His Ile Tyr His Pro Gln 130 135 140

<210> 386

<211> 142

<212> PRT

<213> Homo sapiens

<400> 386

Met Arg Arg Leu Leu Val Thr Ser Leu Val Val Val Leu Leu Trp

1 5 10 15

Glu Ala Gly Ala Val Pro Ala Pro Lys Val Pro Ile Lys Met Gln Val 20 25 30

Lys His Trp Pro Ser Glu Gln Asp Pro Glu Lys Ala Trp Gly Ala Arg
35 40 45

Val Val Glu Pro Pro Glu Lys Asp Asp Gln Leu Val Val Leu Phe Pro 50 60

Val Gln Lys Pro Lys Leu Leu Thr Thr Glu Glu Lys Pro Arg Gly Thr 65 70 75 80

Lys Ala Trp Met Glu Thr Glu Asp Thr Leu Gly Arg Val Leu Ser Pro 85 90 95

Glu Pro Asp His Asp Ser Leu Tyr His Pro Pro Pro Glu Glu Asp Gln
100 105 110

Gly Glu Glu Arg Pro Arg Leu Trp Val Met Pro Asn His Gln Val Leu 115 120 125

Leu Gly Pro Glu Glu Asp Gln Asp His Ile Tyr His Pro Gln 130 135 140

<210> 387

<211> 134

<212> PRT

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<213> Homo sapiens
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<220>

<221> SITE

<222> (101)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 387

Met Leu Val Thr Ala Tyr Leu Ala Phe Val Gly Leu Leu Ala Ser Cys

1 5 10 15

Leu Gly Leu Glu Leu Ser Arg Cys Arg Ala Lys Pro Pro Gly Arg Ala
20 25 30

Cys Ser Asn Pro Ser Phe Leu Arg Phe Gln Leu Asp Phe Tyr Gln Val 35 40 45

Tyr Phe Leu Ala Leu Ala Ala Asp Trp Leu Gln Ala Pro Tyr Leu Tyr 50 55 60

Lys Leu Tyr Gln His Tyr Tyr Phe Leu Glu Gly Gln Ile Ala Ile Leu 65 70 75 80

Tyr Val Cys Gly Leu Ala Ser Thr Val Leu Phe Gly Leu Val Ala Ser 85 90 95

Ser Leu Val Asp Xaa Leu Gly Arg Lys Asn Ser Cys Val Leu Phe Ser 100 105 110

Leu Thr Tyr Ser Leu Cys Cys Leu Thr Lys Leu Ser Gln Asp Tyr Phe 115 120 125

Val Leu Leu Val Gly Arg 130

<210> 388

<211> 450

<212> PRT

<213> Homo sapiens

<400> 388

Met Leu Val Thr Ala Tyr Leu Ala Phe Val Gly Leu Leu Ala Ser Cys
1 10 15

Leu Gly Leu Glu Leu Ser Arg Cys Arg Ala Lys Pro Pro Gly Arg Ala 20 25 30

Cys Ser Asn Pro Ser Phe Leu Arg Phe Gln Leu Asp Phe Tyr Gln Val
35 40 45

Tyr Phe Leu Ala Leu Ala Ala Asp Trp Leu Gln Ala Pro Tyr Leu Tyr 50 55 60

Lys Leu Tyr Gln His Tyr Tyr Phe Leu Glu Gly Gln Ile Ala Ile Leu 65 70 75 80

- Tyr Val Cys Gly Leu Ala Ser Thr Val Leu Phe Gly Leu Val Ala Ser 85 90 95
- Ser Leu Val Asp Trp Leu Gly Arg Lys Asn Ser Cys Val Leu Phe Ser 100 105 110
- Leu Thr Tyr Ser Leu Cys Cys Leu Thr Lys Leu Ser Gln Asp Tyr Phe 115 120 125
- Val Leu Leu Val Gly Arg Ala Leu Gly Gly Leu Ser Thr Ala Leu Leu 130 135 140
- Phe Ser Ala Phe Glu Ala Trp Tyr Ile His Glu His Val Glu Arg His 145 150 155 160
- Asp Phe Pro Ala Glu Trp Ile Pro Ala Thr Phe Ala Arg Ala Ala Phe 165 170 175
- Trp Asn His Val Leu Ala Val Val Ala Gly Val Ala Ala Glu Ala Val
  180 185 190
- Ala Ser Trp Ile Gly Leu Gly Pro Val Ala Pro Phe Val Ala Ala Ile 195 200 205
- Pro Leu Leu Ala Leu Ala Gly Ala Leu Ala Leu Arg Asn Trp Gly Glu 210 215 220
- Asn Tyr Asp Arg Gln Arg Ala Phe Ser Arg Thr Cys Ala Gly Gly Leu 225 230 235 240
- Arg Cys Leu Leu Ser Asp Arg Arg Val Leu Leu Gly Thr Ile Gln
  245 250 255
- Ala Leu Phe Glu Ser Val Ile Phe Ile Phe Val Phe Leu Trp Thr Pro 260 265 270
- Val Leu Asp Pro His Gly Ala Pro Leu Gly Ile Ile Phe Ser Ser Phe 275 280 285
- Met Ala Ala Ser Leu Leu Gly Ser Ser Leu Tyr Arg Ile Ala Thr Ser 290 295 300
- Lys Arg Tyr His Leu Gln Pro Met His Leu Leu Ser Leu Ala Val Leu 305 310 315 320
- Ile Val Val Phe Ser Leu Phe Met Leu Thr Phe Ser Thr Ser Pro Gly 325 330 335
- Gln Glu Ser Pro Val Glu Ser Phe Ile Ala Phe Leu Leu Ile Glu Leu 340 345 350
- Ala Cys Gly Leu Tyr Phe Pro Ser Met Ser Phe Leu Arg Arg Lys Val 355 360 365
- Ile Pro Glu Thr Glu Gln Ala Gly Val Leu Asn Trp Phe Arg Val Pro 370 375 380

Leu His Ser Leu Ala Cys Leu Gly Leu Leu Val Leu His Asp Ser Asp 385 390 395 400

Arg Lys Thr Gly Thr Arg Asn Met Phe Ser Ile Cys Ser Ala Val Met 405 410 415

Val Met Ala Leu Leu Ala Val Val Gly Leu Phe Thr Val Val Arg His
420 425 430

Asp Ala Glu Leu Arg Val Pro Ser Pro Thr Glu Glu Pro Tyr Ala Pro 435 440 445

Glu Leu 450

<210> 389

<211> 125

<212> PRT

<213> Homo sapiens

<400> 389

Leu Phe Met Leu Thr Phe Ser Thr Ser Pro Gly Gln Glu Ser Pro Val

1 10 15

Glu Ser Phe Ile Ala Phe Leu Leu Ile Glu Leu Ala Cys Gly Leu Tyr 20 25 30

Phe Pro Ser Met Ser Phe Leu Arg Arg Lys Val Ile Pro Glu Thr Glu 35 40 45

Gln Ala Gly Val Leu Asn Trp Phe Arg Val Pro Leu His Ser Leu Ala 50 55 60

Cys Leu Gly Leu Leu Val Leu His Asp Ser Asp Arg Lys Thr Gly Thr 65 70 75 80

Arg Asn Met Phe Ser Ile Cys Ser Ala Val Met Val Met Ala Leu Leu 85 90 95

Ala Val Val Gly Leu Phe Thr Val Val Arg His Asp Ala Glu Leu Arg
100 105 110

Val Pro Ser Pro Thr Glu Glu Pro Tyr Ala Pro Glu Leu 115 120 125

<210> 390

<211> 75

<212> PRT

<213> Homo sapiens

<400> 390

Trp Val Pro Arg Glu Lys Val Ala Thr Pro Gly Gln Gln Pro Pro Thr

1 5 10 15

Leu Asn Tyr Arg Gln His Arg Arg Pro Pro Gly Thr Ala Pro Ala Leu 20 25 30

Trp Ala Glu Lys Glu Gly Arg Leu Gly Glu Glu Glu Val Glu Cys 35 40 45

Arg Trp Arg Ser Ala Ser Phe Cys Ser Arg Gly Phe Met Gly Phe Lys
50 55 60

Tyr Asp Asp Ala Ala Leu Arg Arg Cys Thr Val 65 70 75

<210> 391

<211> 321

<212> PRT

<213> Homo sapiens

<400> 391

Met Pro Leu Leu Gly Ile Cys Ala Leu Gly Leu Gln Ala Glu Gly Asp 1 5 10 15

His Glu Leu Leu Trp Gly Tyr Lys Asp Glu Ile Leu Ser Leu Ile His
20 25 30

Val Phe Arg Pro Asp Ile Ser Pro Tyr Phe Gly Leu Phe Tyr Glu Lys 35 40 45

Asn Gly Thr Asn Asp Gly Asp Tyr Val Phe Leu Thr Gly Glu Asp Ser 50 55 60

Tyr Leu Asn Phe Thr Lys Ile Val Glu Trp Asn Gly Lys Thr Ser Leu 65 70 75 80

Asp Trp Trp Ile Thr Asp Lys Cys Asn Met Ile Asn Gly Thr Asp Gly 85 90 95

Asp Ser Phe His Pro Leu Ile Thr Lys Asp Glu Val Leu Tyr Val Phe 100 105 110

Pro Ser Asp Phe Cys Arg Ser Val Tyr Ile Thr Phe Ser Asp Tyr Glu 115 120 125

Ser Val Gln Gly Leu Pro Ala Phe Arg Tyr Lys Val Pro Ala Glu Ile 130 135 140

Leu Ala Asn Thr Ser Asp Asn Ala Gly Phe Cys Ile Pro Glu Gly Asn 145 150 155 160

Cys Leu Gly Ser Gly Val Leu Asn Val Ser Ile Cys Lys Asn Gly Ala 165 170 175

Pro Ile Ile Met Ser Phe Pro His Phe Tyr Gln Ala Asp Glu Arg Phe 180 185 190

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Val Ser Ala Ile Glu Gly Met His Pro Asn Gln Glu Asp His Glu Thr
195 200 205
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Phe Val Asp Ile Asn Pro Leu Thr Gly Ile Ile Leu Lys Ala Ala Lys 210 215 220

Arg Phe Gln Ile Asn Ile Tyr Val Lys Lys Leu Asp Asp Phe Val Glu 225 230 235 240

Thr Gly Asp Ile Arg Thr Met Val Phe Pro Val Met Tyr Leu Asn Glu 245 250 255

Ser Val His Ile Asp Lys Glu Thr Ala Ser Arg Leu Lys Ser Met Ile 260 265 270

Asn Thr Thr Leu Ile Ile Thr Asn Ile Pro Tyr Ile Ile Met Ala Leu 275 280 285

Gly Val Phe Phe Gly Leu Val Phe Thr Trp Leu Ala Cys Lys Gly Gln 290 295 300

Gly Ser Met Asp Glu Gly Thr Ala Asp Glu Arg Ala Pro Leu Ile Arg 305 310 315 320

Thr

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<210> 392
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<211> 449

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (372)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (443)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 392

Thr Trp Arg Thr Val Arg Phe Ser Ser Phe Leu Gly Lys Cys Pro Thr 1 5 10 15

Gly Trp His His Tyr Glu Gly Thr Ala Ser Cys Tyr Arg Val Tyr Leu 20 25 30

Ser Gly Glu Asn Tyr Trp Asp Ala Ala Gln Thr Cys Gln Arg Leu Asn 35 40 45

Gly Ser Leu Ala Thr Phe Ser Thr Asp Gln Glu Leu Arg Phe Val Leu 50 55 60 Ala Gln Glu Trp Asp Gln Pro Glu Arg Ser Phe Gly Trp Lys Asp Gln Arg Lys Leu Trp Val Gly Tyr Gln Tyr Val Ile Thr Gly Arg Asn Arg Ser Leu Glu Gly Arg Trp Glu Val Ala Phe Lys Gly Ser Ser Glu Val Phe Leu Pro Pro Asp Pro Ile Phe Ala Ser Ala Met Ser Glu Asn Asp Asn Val Phe Cys Ala Gln Leu Gln Cys Phe His Phe Pro Thr Leu Arg 135 His His Asp Leu His Ser Trp His Ala Glu Ser Cys Tyr Glu Lys Ser 145 Ser Phe Leu Cys Lys Arg Ser Gln Thr Cys Val Asp Ile Lys Asp Asn 170 Val Val Asp Glu Gly Phe Tyr Phe Thr Pro Lys Gly Asp Asp Pro Cys Leu Ser Cys Thr Cys His Gly Gly Glu Pro Glu Met Cys Val Ala Ala 200 Leu Cys Glu Arg Pro Gln Gly Cys Gln Gln Tyr Arg Lys Asp Pro Lys Glu Cys Cys Lys Phe Met Cys Leu Asp Pro Asp Gly Asn Ser Leu Phe 235 Asp Ser Met Ala Ser Gly Met Arg Leu Val Val Ser Cys Ile Ser Ser Phe Leu Ile Leu Ser Leu Leu Phe Met Val His Arg Leu Arg Gln 265 Arg Arg Arg Glu Arg Ile Glu Ser Leu Ile Gly Ala Asn Leu His His 280 Phe Asn Leu Gly Arg Arg Ile Pro Gly Phe Asp Tyr Gly Pro Asp Gly Phe Gly Thr Gly Leu Thr Pro Leu His Leu Ser Asp Asp Gly Glu Gly Gly Thr Phe His Phe His Asp Pro Pro Pro Pro Tyr Thr Ala Tyr Lys 325 330 Tyr Pro Asp Ile Gly Gln Pro Asp Asp Pro Pro Pro Tyr Glu Ala 345 Ser Ile His Pro Asp Ser Val Phe Tyr Asp Pro Ala Asp Asp Asp Ala

365

360

Phe Glu Pro Xaa Glu Val Ser Leu Pro Ala Pro Gly Asp Gly Gly Ser 370 375 380

Glu Gly Ala Leu Leu Arg Arg Leu Glu Gln Pro Leu Pro Thr Ala Gly 385 390 395 400

Ala Ser Leu Ala Asp Leu Glu Asp Ser Ala Asp Ser Ser Ser Ala Leu 405 410 415

Leu Val Pro Pro Asp Pro Ala Gln Ser Gly Ser Thr Pro Ala Ala Glu
420 425 430

Ala Leu Pro Gly Gly Gly Arg His Ser Arg Xaa Ser Leu Asn Thr Val 435 440 445

Val

<210> 393

<211> 62

<212> PRT

<213> Homo sapiens

<400> 393

Ser His Ser Arg Val Ser Gly Ser Asn Gln Asn Cys Trp Gln Gly Asp  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Ile Ser Met His Lys Cys Asp Pro Gln Lys Val Leu Val Val Phe Val
20 25 30

Thr Phe Cys Lys Ala Phe Phe Tyr Ile Tyr Phe Cys Ala His Phe Phe 35 40 45

Leu Arg Phe Phe Arg Lys Gln Met Tyr Phe Lys Ile Tyr Leu 50 55 60

<210> 394

<211> 42

<212> PRT

<213> Homo sapiens

<400> 394

Ser Phe Arg Asn Thr Val Ile Leu Asn Lys Pro Leu Pro Ile His Leu 1 5 10 15

Ser Pro Ile Arg Cys Val Phe Ser Thr Ile Lys His Leu Tyr Cys Asp 20 25 30

Leu Ile Lys Tyr Ile Phe Gly Cys Ser Gln 35 40

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<210> 395
<211> 193
<212> PRT
<213> Homo sapiens
<400> 395
Ser Cys Cys Cys Se
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Ser Cys Cys Cys Ser Cys Cys Cys Cys Pro Ser Gly Ala Lys Pro Thr 1 5 10 15

Gln Ala Ala Thr Gly Ser Gln Gly Cys Pro Ala Cys Pro Gly His Gln 20 25 30

Gly Arg Met Gly Thr Thr Asp Cys Arg Gly Pro Arg Gly Ser Gln Glu 35 40 45

Ser Gln Pro Phe Pro Gly Ser Glu Asp Pro Lys Gly Arg Tyr Lys Gln 50 55 60

Lys Phe Gln Ser Val Phe Thr Val Thr Arg Gln Thr His Gln Pro Pro 65 70 75 80

Ala Pro Asn Ser Leu Ile Arg Phe Asn Ala Val Leu Thr Asn Pro Gln 85 90 95

Gly Asp Tyr Asp Thr Ser Thr Gly Lys Phe Thr Cys Lys Val Pro Gly 100 105 110

Leu Tyr Tyr Phe Val Tyr His Ala Ser His Thr Ala Asn Leu Cys Val 115 120 125

Leu Leu Tyr Arg Ser Gly Val Lys Val Val Thr Phe Cys Gly His Thr 130 135 140

Ser Lys Thr Asn Gln Val Asn Ser Gly Gly Val Leu Leu Arg Leu Gln 145 150 155 160

Val Gly Glu Glu Val Trp Leu Ala Val Asn Asp Tyr Tyr Asp Met Val 165 170 175

Gly Ile Gln Gly Ser Asp Ser Val Phe Ser Gly Phe Leu Leu Phe Pro 180 185 190

Asp

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<210> 396
<211> 186
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (5)
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (48)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 396

Gln Lys Gly Trp Xaa Ser Ser Gly Ser Ser Cys Arg Ile Ser Gly Arg 1 5 10 15

Cys Ala Leu Ser Arg Met Gly Glu Ser Ile Phe Thr Val Val Tyr Phe 20 25 30

Gly Lys Glu Glu Ile Asn Glu Val Lys Gly Ile Leu Glu Asn Thr Xaa 35 40 , 45

Lys Ala Ala Asn Phe Arg Asn Phe Thr Phe Ile Gln Leu Asn Gly Glu 50 60

Phe Ser Arg Gly Lys Gly Leu Asp Val Gly Ala Arg Phe Trp Lys Gly 65 70 75 80

Ser Asn Val Leu Leu Phe Phe Cys Asp Val Asp Ile Tyr Phe Pro Ser 85 90 95

Glu Phe Leu Asn Thr Cys Arg Leu Asn Thr Gln Pro Gly Lys Lys Val

Phe Tyr Pro Val Leu Phe Ser Gln Tyr Asn Pro Gly Ile Ile Tyr Gly 115 120 125

His His Asp Ala Val Pro Pro Leu Glu Gln Gln Leu Val Ile Lys Lys 130 135 140

Glu Thr Gly Phe Trp Arg Asp Phe Gly Phe Gly Met Thr Cys Gln Tyr 145 150 155 160

Arg Ser Asp Phe Ile Asn Ile Gly Arg Thr Asn Leu His Leu Tyr Cys 165 170 175

His Pro Glu Ala Thr Gly Pro Cys Arg Pro 180 185